

H.R. REP. 101-490(I), H.R. REP. 101-490, H.R. Rep. No. 490(I),
101ST Cong., 2ND Sess. 1990, 1990 WL 258792 (Leg.Hist.)
P.L. 101-549, CLEAN AIR ACT AMENDMENTS OF 1990

HOUSE REPORT NO. 101-490(I)

May 17, 1990
[To accompany H.R. 3030]

CONTENTS

	Page
The amendment	1
Purpose and summary	144
Need for legislation	144
National ambient air quality standards	145
Hazardous air pollutants	150
Acid deposition.....	157
Economic impacts	159
Discussion of the Committee bill (H.R. 3030) and title-by-title analysis	194
Title I: Provisions for Attainment and Maintenance of National Air	
Quality Standards	194
Introduction.....	194
Background.....	194
Summary of title I	195
Section-by-section analysis	215
Section 101. General planning requirements	215
Section 102. General provisions for nonattainment areas	222
Section 103. Additional provisions for ozone nonattainment areas	229
Section 104. Additional provisions for carbon monoxide nonattainment areas	258
Section 105. Additional provisions for particulate matter nonattainment areas	262

Section 106. Additional provisions for areas designated nonattainment for sulfur oxides, nitrogen dioxide, and lead	270
Section 107. Provisions related to Indian Tribes	271
Section 108. Miscellaneous provisions	271
Title II: Provisions for Control of Mobile Source Emissions	274
Introduction.....	274
Background.....	274
Summary of title II	274
Section-by-section analysis	284
Section 201. Clean fuel requirements	284
Section 202. Emissions of hydrocarbons, carbon monoxide, and oxides of nitrogen from passenger cars	298
Section 203. Conforming amendment	302
Section 204. Carbon monoxide emissions at cold temperatures	302
Section 205. Evaporative emissions	302
Section 206. Control of vehicle refueling emissions	303
Section 207. Mobile source-related air toxics	305
Section 208. Emission control diagnostics systems	305
Section 209. Auto warranties	307
Section 210. Heavy-duty trucks	309
Section 211. Nonroad engines and vehicles	309
Section 212. Vehicle certification	310
Section 213. In-use compliance-Recall	310
Section 214. Compliance program fees	311
Section 215. Information collection	311
Section 216. Fuel volatility	312
Section 217. Diesel fuel sulfur content	312
Section 218. Lead substitutes for gasoline additives	312
Section 219. Nonroad fuels	313

Section 220. Fuel waivers	313
Section 221. Market-based alternative controls	313
Section 222. State fuel regulation	314
Section 223. Enforcement	314
Section 224. High altitudetesting	315
Section 225. Technical amendments	315
Title III: Provisions for Control of Hazardous Air Pollution	315
Introduction.....	315
Background.....	315
Summary of title III	315
Section-by section analysis	324
Section 301. Technology-based standards for hazardous air pollutants.....	324
Title IV: Permits	341
Introduction and background	341
Section-by-section analysis	344
Section 401. Permits	344
Title V: Acid Deposition Control	355
Introduction.....	355
Background.....	356
Section-by-section analysis	369
Section 501. Acid deposition control	369
Section 502. New sourcer performance standard	390
Title VI: Provisions Relating to Enforcement	390
Introduction and background	390
Section-by-section analysis	391
Section 601. Section 113 Federal enforcement	391
Section 602. Compliance certification	394
Section 603. Administrative enforcement subpoenas	394

Section 604. Enforcement of administrative orders	395
Section 605. Scope of emergency orders	395
Section 606. Contractor listings	395
Section 607. Judicial review pending reconsideration of regulation.....	395
Section 608. Citizen suits	395
Section 609. Enhanced implementation and enforcement of new source review requirements	395
Section 610. Movable stationary sources	395
Section 611. Enforcement of new titles of the act	395
Title VII: Miscellaneous Provisions	396
Section-by-section analysis	396
Section 701. Grants for support of air pollution planning and control programs	396
Section 702. Annual report repeal	396
Section 703. Review and revision of criteria and standards	396
Section 704. Air pollutant release investigation board	397
Section 705. Emission factors	397
Section 706. Land use authority	401
Title VIII: Other Provisions	401
Section-by-section analysis	401
Section 801. Program to monitor and improve air quality along the United States/Mexico border	401
Section 802. Equivalent air quality controls among nations	402
Section 803. Report on costs and benefits	402
Section 804. United States/Mexico Air Quality	403
Hearings and previous legislative activity	403
Committee consideration	405
Committee oversight findings	406

Committee cost estimate	406
Congressional Budget Office estimate	407
Inflationary impact statement	417
Changes in existing law made by the bill, as reported	417
Additional, supplemental, and dissenting views	672

The Commerce on Energy and Commerce, to whom was referred the bill (H.R. 3030) to amend the Clean Air Act to provide for the attainment and maintenance of the national ambient air quality standards, the control of toxic air pollutants, the prevention of acid deposition, and other improvements in the quality of the Nation's air, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE, REFERENCE, AND TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the “Clean Air Act Amendments of 1990”.

(b) Reference.—Whenever in this Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Clean Air Act.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

TITLE I—PROVISIONS FOR ATTAINMENT AND MAINTENANCE OF NATIONAL AMBIENT AIR QUALITY STANDARDS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 101. GENERAL PLANNING REQUIREMENTS.

(a) Area Designations.—Section 107(d) (42 U.S.C. 7407(d)) is amended to read as follows:

“(d) Designations.—

“(1) Designations generally.—

“(A) Submission by governors of initial designations following promulgation of new or revised standards.—By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as—

“(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

“(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

“(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

“(B) Promulgation by epa of designations.—(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

“(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

“(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3)(B) (relating to redesignation).

“(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

“(C) Designations by operation of law.—(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1) (A), (B), or (C) of this subsection (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated, by operation of law, as a nonattainment area for such pollutant within the meaning of subparagraph (A)(i).

“(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

“(iii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(D) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

“(2) Publication of designations and redesignations.—(A) The Administrator shall publish a notice in the Federal Register promulgating any designation under paragraph (1) or (5), or announcing any designation under paragraph (4), or promulgating any redesignation under paragraph (3).

“(B) Promulgation or announcement of a designation under paragraph (1), (4) or (5) shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.

“(3) Redesignation.—(A) Subject to the requirements of subparagraph (E), and on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate, the Administrator may at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised. In issuing such notification, which shall be public, to the Governor, the Administrator shall provide such information as the Administrator may have available explaining the basis for the notice.

“(B) No later than 120 days after receiving a notification under subparagraph (A), the Governor shall submit to the Administrator such redesignation, if any, of the appropriate area (or areas) or portion thereof within the State or interstate area, as the Governor considers appropriate.

“(C) No later than 120 days after the date described in subparagraph (B), the Administrator shall promulgate the redesignation, if any, of the area or portion thereof, submitted by the Governor in accordance with subparagraph (B), making such modifications as the Administrator may deem necessary, in the same manner and under the same procedure as is applicable under clause (ii) of paragraph (1)(B), except that the phrase ‘60 days’ shall be substituted for the phrase ‘120 days’ in that clause. If the Governor does not submit, in accordance with subparagraph (B), a redesignation for an area (or portion thereof) identified by the Administrator under subparagraph (A), the Administrator shall promulgate such redesignation, if any, that the Administrator deems appropriate.

“(D) The Governor of any State may, on the Governor's own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

“(E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless—

“(i) the Administrator determines that the area has attained the national ambient air quality standard;

“(ii) the Administrator has fully approved the applicable implementation plan for the area under section 110(k);

“(iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

“(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and

“(v) the State containing such area has met all requirements applicable to the area under this Act.

“(F) The Administrator shall not promulgate any redesignation of any area (or portion thereof) from nonattainment to unclassifiable.

“(4) Nonattainment designations for ozone, carbon monoxide and particulate matter (pm-10).—

“(A) Ozone and carbon monoxide.—(i) Within 120 days after the date of the enactment of the Clean Air Act Amendments of 1990, each Governor of each State shall submit to the Administrator a list that designates, affirms or reaffirms the designation of, or redesignates (as the case may be), all areas (or portions thereof) of the Governor's State as attainment, nonattainment, or unclassifiable with respect to the national ambient air quality standards for ozone and carbon monoxide.

“(ii) No later than 120 days after the date the Governor is required to submit the list of areas (or portions thereof) required under clause (i) of this subparagraph, the Administrator shall promulgate such designations, making such modifications as the Administrator may deem necessary, in the same manner, and under the same procedure, as is applicable under clause (ii) of paragraph (1)(B), except that the phrase ‘60 days’ shall be substituted for the phrase ‘120 days’ in that clause. If the Governor does not submit, in accordance with clause (i) of this subparagraph, a designation for an area (or portion thereof), the Administrator shall promulgate the designation that the Administrator deems appropriate.

“(iii) No nonattainment area may be redesignated as an attainment area under this subparagraph.

“(iv) Notwithstanding paragraph (1)(C)(ii) of this subsection, if an ozone or carbon monoxide nonattainment area located within a metropolitan statistical area or consolidated metropolitan statistical area (as established by the Bureau of the Census) is classified under part D of this title as a Serious, Severe, or Extreme Area, the boundaries of such area are hereby revised (on the date 45 days after such classification) by operation of law to include the entire metropolitan statistical area or consolidated metropolitan statistical area, as the case may be, unless within such 45-day period the Governor (in consultation with State and local air pollution control agencies) notifies the Administrator that additional time is necessary to evaluate the application of clause (v). Whenever a Governor has submitted such a notice to the Administrator, such boundary revision shall occur on the later of the date 8 months after such classification or 14 months after the date of the enactment of the Clean Air Act Amendments of 1990 unless the Governor makes the finding referred to in clause (v), and the Administrator concurs in such finding, within such period. Except as otherwise provided in this paragraph, a boundary revision under this clause or clause (v) shall apply for purposes of any State implementation plan revision required to be submitted after the date of the enactment of the Clean Air Act Amendments of 1990.

“(v) Whenever the Governor of a State has submitted a notice under clause (iv), the Governor, in consultation with State and local air pollution control agencies, shall undertake a study to evaluate whether the entire metropolitan statistical area or consolidated metropolitan statistical area should be included within the nonattainment area. Whenever a Governor finds and demonstrates to the satisfaction of the Administrator, and the Administrator concurs in such finding, that with respect to a portion of a metropolitan statistical area or consolidated metropolitan statistical area, sources in the portion do not contribute significantly to violation of the national ambient air quality standard, the Administrator shall approve the Governor's request to exclude such portion from the nonattainment area. In making such finding, the Governor and the Administrator shall consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport.

“(B) PM-10 designations.—By operation of law, until redesignation by the Administrator pursuant to paragraph (3)–

“(i) each area identified in 52 Federal Register 29383 (Aug. 7, 1987) as a Group I area (except to the extent that such identification was modified by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990) is designated nonattainment for PM-10;

“(ii) any area containing a site for which air quality monitoring data show a violation of the national ambient air quality standard for PM-10 before January 1, 1989 (as determined under part 50, appendix K of title 40 of the Code of Federal Regulations) is hereby designated nonattainment for PM-10; and

“(iii) each area not described in clause (i) or (ii) is hereby designated unclassifiable for PM-10.

Any designation for particulate matter (measured in terms of total suspended particulates) that the Administrator promulgated pursuant to this subsection (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) shall remain in effect for purposes of implementing the maximum allowable increases in concentrations of particulate matter (measured in terms of total suspended particulates) pursuant to section 163(d), until the Administrator determines that such designation is no longer necessary for that purpose.

“(5) Designations for lead.—The Administrator may, in the Administrator's discretion at any time the Administrator deems appropriate, require a State to designate areas (or portions thereof) with respect to the national ambient air quality standard for lead in effect as of the date of the enactment of the Clean Air Act Amendments of 1990, in accordance with the procedures under subparagraphs (A) and (B) of paragraph (1), except that in applying subparagraph (B)(i) of paragraph (1) the phrase ‘2 years from the date of promulgation of the new or revised national ambient air quality standard’ shall be replaced by the phrase ‘1 year from the date the Administrator notifies the State of the requirement to designate areas with respect to the standard for lead’.”.

(b) General Requirements for Implementation Plans.—Section 110(a)(2) (42 U.S.C. 7410(a)(2)) is amended to read as follows:

“(2) Each implementation plan submitted by a State under this Act shall be adopted by the State after reasonable notice and public hearing. Each such plan shall—

“(A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act;

“(B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to—

“(i) monitor, compile, and analyze data on ambient air quality, and

“(ii) upon request, make such data available to the Administrator;

“(C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;

“(D) contain adequate provisions—

“(i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—

“(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

“(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,

“(ii) insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement);

“(E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 128, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;

“(F) require, as may be prescribed by the Administrator—

“(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

“(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and

“(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;

“(G) provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;

“(H) provide for revision of such plan—

“(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and

“(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this Act;

“(I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);

“(J) meet the applicable requirements of section 121 (relating to consultation), section 127 (relating to public notification), and part C (relating to prevention of significant deterioration of air quality and visibility protection);

“(K) provide for—

“(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and

“(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;

“(L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover—

“(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

“(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title IV;

“(M) provide for consultation and participation by local political subdivisions affected by the plan;

“(N) provide for establishment (consistent with the requirements of this Act) of a small source technical assistance entity that shall—

“(i) offer to audit the operations of small sources to determine compliance with all requirements of this Act or offer to refer small sources to qualified auditors;

“(ii) provide information on alternative technologies, including equipment, chemical products, and methods of operation, which will help reduce air pollution;

“(iii) facilitate lawful cooperation among small generators and other persons where such cooperation would further comply with this Act; and

“(O) no later than 4 years after the date of the enactment of the Clean Air Act Amendments of 1990, contain a permit program meeting the requirements of title IV.”.

(c) Additional Provisions.—Section 110 (42 U.S.C. 7410) is amended by adding the following at the end thereof:

“(k) Environmental Protection Agency Action on Plan Submissions.—

“(1) Completeness of plan submissions.—

“(A) Completeness criteria.—Within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate minimum criteria that any plan submission must meet before the Administrator is required to act on such submission under this subsection. The criteria shall be limited to the information necessary to enable the Administrator to determine whether the plan submission complies with the provisions of this Act.

“(B) Completeness finding.—Within 60 days of the Administrator's receipt of a plan or plan revision, but no later than 6 months after the date, if any, by which a State is required to submit the plan or revision, the Administrator shall determine whether each part of the plan or revision meets the minimum criteria established pursuant to subparagraph (A). Any plan or plan revision that a State submits to the Administrator, and that has not been determined by the Administrator (by the date 6 months after receipt of the submission) to have failed to meet the minimum criteria established pursuant to subparagraph (A), shall on that date be deemed by operation of law to meet such minimum criteria.

“(C) Effect of finding of incompleteness.—Where the Administrator determines that a plan submission (or part thereof) does not meet the minimum criteria established pursuant to subparagraph (A), the State shall be treated as not having made the submission (or, in the Administrator's discretion, part thereof).

“(2) Deadline for action.—Within 12 months of a determination by the Administrator (or a determination deemed by operation of law) under paragraph (1) that a State has submitted a plan or plan revision (or, in the Administrator's discretion, part thereof) that meets the minimum criteria established pursuant to paragraph (1), if applicable (or, if those criteria are not applicable, within 12 months of submission of the plan or revision), the Administrator shall act on the submission in accordance with paragraph (3).

“(3) Full and partial approval and disapproval.—In the case of any submittal on which the Administrator is required to act under paragraph (2), the Administrator shall approve such submittal as a whole if it meets all of the applicable requirements of this Act. If a portion of the plan revision meets all the applicable requirements of this Act, the Administrator may approve the plan revision in part and disapprove the plan revision in part. The plan revision shall not be treated as meeting the requirements of this Act until the Administrator approves the entire plan revision as complying with the applicable requirements of this Act.

“(4) Conditional approval.—The Administrator may approve a plan revision based on a commitment of the State to adopt specific enforceable measures by a date certain, but not later than 1 year after the date of approval of the plan revision. Any such conditional approval shall be treated as a disapproval if the State fails to comply with such commitment.

“(5) Calls for plan revisions.—Whenever the Administrator finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the interstate pollutant transport described in section 176A or section 184, or to otherwise comply with any requirement of this Act, the Administrator shall require the State to revise the plan as necessary to correct such inadequacies. The Administrator shall notify the State of the inadequacies, and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions. Such findings and notice shall be public. Any finding under this paragraph shall, to the extent the Administrator deems appropriate, subject the State to the requirements of this Act to which the State was subject when it developed and submitted the plan for which such finding was made, except that the Administrator may adjust any dates applicable under such requirements as appropriate (except that the Administrator may not adjust any attainment date prescribed under part D, unless such date has elapsed).

“(6) Corrections.—Whenever the Administrator determines that the Administrator's action approving, disapproving, or promulgating any plan or plan revision (or part thereof), area designation, redesignation, classification, or reclassification was in error, the Administrator may in the same manner as the approval, disapproval, or promulgation revise such action as appropriate without requiring any further submission from the State. Such determination and the basis thereof shall be provided to the State and public.

“(l) Plan Revisions.—Each revision to an implementation plan submitted by a State under this Act shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of this Act.

“(m) Sanctions.—The Administrator may apply any of the sanctions listed in section 179(b) at any time (or at any time after) the Administrator makes a finding, disapproval, or determination under paragraphs (1) through (4), respectively, of section 179(a) in relation to any plan or plan item (as that term is defined by the Administrator) required under this Act, with respect to any portion of the State the Administrator determines reasonable and appropriate, for the purpose of ensuring that the requirements of this Act relating to such plan or plan item are met. The Administrator shall, by rule, establish criteria for exercising his authority under the previous sentence regarding application of sanctions to portions of a State not in a nonattainment area subject to this section or part D.

“(n) Savings Clauses.—

“(1) Existing plan provisions.—Any provision of any applicable implementation plan that was approved or promulgated by the Administrator pursuant to this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect as part of such applicable implementation plan, except to the extent that a revision to such provision is approved or promulgated by the Administrator pursuant to this Act.

“(2) Attainment dates.—For any area not designated nonattainment, any plan or plan revision submitted or required to be submitted by a State—

“(A) in response to the promulgation or revision of a national primary ambient air quality standard in effect on the date of the enactment of the Clean Air Act Amendments of 1990, or

“(B) in response to a finding of substantial inadequacy under subsection (a)(2) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990),

shall provide for attainment of the national primary ambient air quality standards within 3 years of the date of the enactment of the Clean Air Act Amendments of 1990 or within 5 years of issuance of such finding of substantial inadequacy, whichever is later.

“(3) Retention of construction moratorium in certain areas.—In the case of an area to which, immediately before the date of the enactment of the Clean Air Act Amendments of 1990, the prohibition on construction or modification of major stationary sources prescribed in subsection (a)(2)(I) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) applied by virtue of a finding of the Administrator that the State containing such area had not submitted an implementation plan meeting the requirements of section 172(b)(6) (relating to establishment of a permit program) (as in effect immediately before the date of enactment of the Clean Air Act Amendments of 1990) or 172(a)(1) (to the extent such requirements relate to provision for attainment of the primary national ambient air quality standard for sulfur oxides by December 31, 1982) as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, no major stationary source of the relevant air pollutant or pollutants shall be constructed or modified in such area until the Administrator finds that the plan for such area meets the applicable requirements of section 172(c)(5) (relating to permit programs) or subpart 5 of part D (relating to attainment of the primary national ambient air quality standard for sulfur dioxide), respectively.”.

(d) Conforming Amendments.—Section 110 (42 U.S.C. 7410) is amended as follows:

(1) Strike out subparagraph (D) of section 110(a)(3).

(2) Strike out paragraph (4) of section 110(a).

(3) In subsection (c)—

(A) strike out subparagraph (A) of paragraph (2);

(B) strike out paragraph (2)(C);

(C) strike out paragraph (4); and

(D) in paragraph (5)(B) strike out “(including the written evidence required by Part D),”.

(4) Strike subsection (d) and in section 302 (42 U.S.C. 7602) add the following new subsection after subsection (p):

“(q) For purposes of this Act, the term ‘applicable implementation plan’ means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110, or promulgated under section 110(c), or promulgated or approved pursuant to regulations promulgated under section 301(d) and which implements the relevant requirements of this Act.”.

(5) strike out subsection (e).

(6) In subsection (g), strike “the required four month period” and insert “12 months of submission of the proposed plan revision”.

(7) In subsection (h)—

(A) strike “one year after the date of enactment of the Clean Air Act Amendments of 1977 and annually thereafter” and insert “5 years after the date of the enactment of the Clean Air Act Amendments of 1990, and every 3 years thereafter”; and

(B) strike the second sentence of paragraph (1).

(8) In subsection (a)(1) strike “nine months” each place it appears and insert “3 years (or such shorter period as the Administrator may prescribe)”.

(e) Federal Facilities.—Section 118(a) (42 U.S.C. 7418(a)) is amended by inserting “, including fees that meet the requirements of title IV or any other reasonable service charges that are equally applicable to, and paid by, facilities owned or operated by State, regional, or local government entities,” immediately after “respecting the control and abatement of air pollution”.

(f) Conformity Requirements.—Section 176(c) (42 U.S.C. 7506(c)) is amended by striking “(1)”, “(2)”, “(3)” and “(4)” where they appear, by inserting “(1)” after “(c)”, and by adding the following at the end thereof: “Conformity to a plan means—

“(A) conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

“(B) that such activities will not, considering any growth likely to result from such activities—

“(i) cause or contribute to a failure to attain any standard in any area; or

“(ii) delay timely attainment of any standard or any required interim emission reductions.

“(2) No later than one year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator, in consultation with the Secretary of Transportation, shall promulgate criteria and procedures for determining conformity and for keeping the Secretary of Transportation and the Administrator informed about such projects. Such procedures shall include a requirement that each State containing an ozone or carbon monoxide nonattainment area shall submit to the Administrator and the Secretary of Transportation, within 18 months after such date of enactment, a revision to its implementation plan that includes, for each such nonattainment area, criteria and procedures for assessing the conformity of any plan, program or project subject to the conformity requirements of this subsection.”.

SEC. 102. GENERAL PROVISIONS FOR NONATTAINMENT AREAS.

(a) Definitions.—(1) Part D of title I is amended by inserting immediately after “Part D—Plan Requirements for Nonattainment Areas” the following:

“Subpart 1—Nonattainment Areas in General

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(2) Section 171 (42 U.S.C. 7501) is amended as follows:

(A) In the introductory language, strike out “and section 110(a)(2)(I)”.

(B) Amend paragraph (1) to read as follows:

“(1) Reasonable further progress.—The term ‘reasonable further progress’ means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date.”.

(C) Amend paragraph (2) to read as follows:

“(2) Nonattainment area.—The term ‘nonattainment area’ means, for any air pollutant, an area which is designated ‘nonattainment’ with respect to that pollutant within the meaning of section 107(d).”.

(b) Nonattainment Plan Provisions in General.—Section 172 (42 U.S.C. 7502) is amended to read as follows:

“SEC. 172. NONATTAINMENT PLAN PROVISIONS IN GENERAL.

“(a) Classifications and Attainment Dates.—

“(1) Classifications.—(A) On or after the date the Administrator promulgates the designation of an area as a nonattainment area pursuant to section 107(d) with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on the date of the enactment of the Clean Air Act Amendments of 1990), the Administrator may classify the area for the purpose of applying an attainment date pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, the Administrator may consider such factors as the severity of nonattainment in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

“(B) The Administrator shall publish a notice in the Federal Register announcing each classification under subparagraph (A), except the Administrator shall provide an opportunity for at least 30 days for written comment. Such classification shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (concerning notice and comment) and shall not be subject to judicial review until the Administrator takes final action under subsection (k) or (l) of section 110 (concerning action on plan submissions) or section 179 (concerning sanctions) with respect to any plan submissions required by virtue of such designation.

“(C) This paragraph shall not apply with respect to nonattainment areas for which classifications are specifically provided under other provisions of this part.

“(2) Attainment dates for nonattainment areas.—(A) The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 107(d), except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

“(B) The attainment date for an area designated nonattainment with respect to a secondary national ambient air quality standard shall be as expeditiously as practicable after the date such area was designated nonattainment under section 107(d).

“(C) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the ‘Extension Year’) the attainment date determined by the Administrator under subparagraph (A) or (B) if—

“(i) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

“(ii) in accordance with guidance published by the Administrator, no more than a minimal number of exceedances of the relevant national ambient air quality standard has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this subparagraph for a single nonattainment area.

“(D) This paragraph shall not apply with respect to nonattainment areas for which attainment dates are specifically provided under other provisions of this part.

“(b) Schedule for Plan Submissions.—At the time the Administrator promulgates the designation of an area as nonattainment with respect to a national ambient air quality standard under section 107(d), the Administrator shall establish a schedule according to which the State containing such area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2). Such schedule must, at a minimum, include a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2).

“(c) Nonattainment Plan Provisions.—The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

“(1) In general.—Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

“(2) RFP.—Such plan provisions shall require reasonable further progress.

“(3) Inventory.—Such plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure that the requirements of this part are met.

“(4) Identification and quantification.—Such plan provisions shall expressly identify and quantify the emissions, if any, of any such pollutant or pollutants which will be allowed, in accordance with section 173(a)(1)(B), from the construction and operation of major new or modified stationary sources in each such area. The plan shall demonstrate to the satisfaction of the Administrator that the emissions quantified for this purpose will be consistent with the achievement of reasonable further progress and will not interfere with attainment of the applicable national ambient air quality standard by the applicable attainment date.

“(5) Permits for new and modified major stationary sources.—Such plan provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with section 173.

“(6) Other measures.—Such plan provisions shall include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part.

“(7) Compliance with section 110(a)(2).—Such plan provisions shall also meet the applicable provisions of section 110(a)(2).

“(8) Equivalent techniques.—Upon application by any State, the Administrator may allow the use of equivalent modeling, emission inventory, and planning procedures, unless the Administrator determines that the proposed techniques are, in the aggregate, less effective than the methods specified by the Administrator.

“(9) Contingency measures.—Such plan shall provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date applicable under this part. Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.

“(d) Plan Revisions Required in Response to Finding of Plan Inadequacy.—Any plan revision for a nonattainment area which is required to be submitted in response to a finding by the Administrator pursuant to section 110(k)(5) (relating to calls for plan revisions) must correct the plan deficiency (or deficiencies) specified by the Administrator and meet all other applicable plan requirements of section 110 and this part. The Administrator may reasonably adjust the dates otherwise applicable under such requirements to such revision (except for attainment dates that have not yet elapsed), to the extent necessary to achieve a consistent application of such requirements. In order to facilitate submittal by the States of adequate and approvable plans consistent with the applicable requirements of this Act, the Administrator shall, as appropriate and from time to time, issue written guidelines, interpretations, and information to the States which shall be available to the public, taking into consideration any such guidelines, interpretations, or information provided before the date of the enactment of the Clean Air Act Amendments of 1990.

“(e) Future Modification of Standard.—If the Administrator relaxes a national primary ambient air quality standard after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, within 12 months after the relaxation, promulgate requirements applicable to all areas which have not attained that standard as of the date of such relaxation. Such requirements shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.”.

(c) New Source Permit Requirements.—Section 173 (42 U.S.C. 7503) is amended as follows:

(1) Strike the center heading and “Sec. 173.” and insert:

“SEC. 173. PERMIT REQUIREMENTS.”.

(2) Insert “(a) In General.—” before the first sentence.

(3) Insert the following after “(1)”: “in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 110 and this part,”.

(4) Make the following amendments in subparagraph (A) of paragraph (1):

(A) Insert “sufficient offsetting emissions reductions have been obtained, such that” immediately after the comma following “commence operation”.

(B) Strike “allowed under the applicable implementation plan” and insert “(as determined in accordance with the regulations under this paragraph)”.

(5) Make the following amendments in subparagraph (B) of paragraph (1):

(A) Insert “in the case of a new or modified major stationary source which is located in a zone (within the nonattainment area) identified by the Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted,” at the beginning thereof.

(B) Strike “172(b)” and insert “172(c)”.

(6) Make the following amendments in paragraph (4):

(A) Insert “the Administrator has not determined that” after “(4)”.

(B) Strike “being carried out” and insert “not being adequately implemented”.

(C) Replace the period at the end thereof with “; and”.

(7) Add the following new paragraph after paragraph (4):

“(5) an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.”.

(8) Strike “(1)(A) shall be legally binding” in the concluding sentence of subsection (a), as redesignated by this subsection and insert “(1) shall be federally enforceable”.

(9) Add a new subsection (b) to read as follows:

“(b) Prohibition on Use of Old Growth Allowances.—Any growth allowance included in an applicable implementation plan to meet the requirements of section 172(b)(5) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) shall not be valid for use in any area that received or receives a notice under section 110(a)(2)(H)(ii) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) or under section 110(k) (1) that its applicable implementation plan containing such allowance is substantially inadequate.”.

(10) Add the following new subsections at the end thereof:

“(c) Offsets.—(1) The owner or operator of a new or modified major stationary source may comply with any offset requirement in effect under this part for increased emissions of any air pollutant only by obtaining emission reductions of such air pollutant from the same source or other sources in the same nonattainment area, except that the State may allow the owner or operator of a source to obtain such emission reductions in another nonattainment area if (A) the other area has an equal or higher nonattainment classification than the area in which the source is located and (B) emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located. Such emission reductions shall be, by the time a new or modified source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the area.

“(2) Emission reductions otherwise required by this Act shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise required by this Act shall be creditable as emission reductions for such purposes if such emission reductions meet the requirements of paragraph (1).

“(d) Control Technology Information.—The State shall provide that control technology information from permits issued under this section will be promptly submitted to the Administrator for purposes of making such information available through the RACT/BACT/LAER clearinghouse to other States and to the general public.”.

(d) Planning Procedures.—Section 174 (42 U.S.C. 7504) is amended to read as follows:

“SEC. 174. PLANNING PROCEDURES.

“(a) In General.—For any ozone or carbon monoxide nonattainment area, the State containing such area and elected officials of affected local governments shall, before the date required for submittal of the inventory described under sections 182(a)(1) and 187(a)(1), jointly review and update as necessary the planning procedures adopted pursuant to this subsection as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, or develop new planning procedures pursuant to this subsection, as appropriate. In preparing such procedures the State and local elected officials shall determine which elements of a revised implementation plan will be developed, adopted, and implemented (through means including enforcement) by the State and which by local governments or regional agencies, or any combination of local governments, regional agencies, or the State. The implementation plan required by this part shall be prepared by an organization certified by the State, in consultation with elected officials of local governments and in accordance with the determination under the second sentence of this subsection. Such organization shall include elected officials of local governments in the affected area, and representatives of the State air quality planning agency, the State transportation planning agency, the metropolitan planning organization designated to conduct the continuing, cooperative and comprehensive transportation planning process for the area under section 134 of title 23, United States Code, the organization responsible for the air quality maintenance planning process under regulations implementing this Act, and any other organization with responsibilities for developing, submitting, or implementing the plan required by this part. Such organization may be one that carried out these functions before the date of the enactment of the Clean Air Act Amendments of 1990.

“(b) Coordination.—The preparation of implementation plan provisions and subsequent plan revisions under the continuing transportation-air quality planning process described in section 108(e) shall be coordinated with the continuing, cooperative and comprehensive transportation planning process required under section 134 of title 23, United States Code, and such planning processes shall take into account the requirements of this part.

“(c) Joint Planning.—In the case of a nonattainment area that is included within more than one State, the affected States may jointly, through interstate compact or otherwise, undertake and implement all or part of the planning procedures described in this section.”.

(e) Maintenance Plans.—After section 175 insert:

“SEC. 175A. MAINTENANCE PLANS.

“(a) Plan Revision.—Each State which submits a request under section 107(d) for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision of the applicable State implementation plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

“(b) Subsequent Plan Revisions.—8 years after redesignation of any area as an attainment area under section 107(d), the State shall submit to the Administrator an additional revision of the applicable State implementation plan for maintaining the national primary ambient air quality standard for 10 years after the expiration of the 10-year period referred to in subsection (a).

“(c) Nonattainment Requirements Applicable Pending Plan Approval.—Until such plan revision is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part shall continue in force and effect with respect to such area.

“(d) Contingency Provisions.—Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the Administrator, in the Administrator's discretion, requires the State to submit a revised State implementation plan.”.

(f) Interstate Transport Provisions.—

(1) Interstate transport commissions.—After section 176 (42 U.S.C. 7506) insert:

“SEC. 176A. INTERSTATE TRANSPORT COMMISSIONS.

“(a) Authority To Establish Interstate Transport Regions.—Whenever, on the Administrator's own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. The Administrator, on the Administrator's own motion or upon petition from the Governor of any State, or upon the recommendation of a transport commission established under subsection (b), may—

“(1) add any State or portion of a State to any region established under this subsection whenever the Administrator has reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region, or

“(2) remove any State or portion of a State from the region whenever the Administrator has reason to believe that the control of emissions in that State or portion of the State pursuant to this section will not significantly contribute to the attainment of the standard in any area in the region.

The Administrator shall approve or disapprove any such petition or recommendation within 18 months of its receipt. The Administrator shall establish appropriate proceedings for public participation regarding such petitions and motions, including notice and comment.

“(b) Transport Commissions.—

“(1) Establishment.—Whenever the Administrator establishes a transport region under subsection (a), the Administrator shall establish a transport commission comprised of (at a minimum) each of the following members:

“(A) The Governor of each State in the region or the designee of each such Governor.

“(B) The Administrator or the Administrator's designee.

“(C) The Regional Administrator (or the Administrator's designee) for each Regional Office for each Environmental Protection Agency Region affected by the transport region concerned.

“(D) An air pollution control official representing each State in the region, appointed by the Governor.

Decisions of, and recommendations and requests to, the Administrator by each transport commission may be made only by a majority vote of all members other than the Administrator and the Regional Administrators (or designees thereof).

“(2) Recommendations.—The transport commission shall assess the degree of interstate transport of the pollutant or precursors to the pollutant throughout the transport region, assess strategies for mitigating the interstate pollution, and recommend to the Administrator such measures as the Commission determines to be necessary to ensure that the plans for the relevant States meet the requirements of section 110(a)(2)(D). Such commission shall not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.).

“(c) Commission Requests.—A transport commission established under subsection (b) may request the Administrator to issue a finding under section 110(k)(5) that the implementation plan for one or more of the States in the transport region is substantially inadequate to meet the requirements of section 110(a)(2)(D). The Administrator shall approve, disapprove, or partially approve and partially disapprove such a request within 18 months of its receipt and, to the extent the Administrator approves such request, issue the finding under section 110(k)(5) at the time of such approval. In acting on such request, the Administrator shall provide an opportunity for public participation and shall address each specific recommendation made by the commission. Approval or disapproval of such a request shall constitute final agency action within the meaning of section 307(b).”.

(2) Amendments conforming to transport provisions.—Section 106 (42 U.S.C. 7406) is amended as follows:

(A) Insert “or of implementing section 176A (relating to control of interstate air pollution) or section 184 (relating to control of interstate ozone pollution)” immediately following “section 107”.

(B) Insert “any commission established under section 176A (relating to control of interstate air pollution) or section 184 (relating to control of interstate ozone pollution) or” immediately following “program costs of”.

(C) Insert “or such commission” in the last sentence immediately following “such agency”.

(D) Insert “or commission” at the end thereof, immediately before the period.

(g) Sanctions.—After section 178 (42 U.S.C. 7508) insert:

“SEC. 179. SANCTIONS AND CONSEQUENCES OF FAILURE TO ATTAIN.

“(a) State Failure.—For any implementation plan or plan revision required under this part (or required in response to a finding of substantial inadequacy as described in section 110(k)(5)), if the Administrator—

“(1) finds that a State has failed, for an area designated nonattainment under section 107(d), to submit a plan, or to submit 1 or more of the elements (as determined by the Administrator) required by the provisions of this Act applicable to such an area, or has failed to make a submission for such an area that satisfies the minimum criteria established in relation to any such element under section 110(k),

“(2) disapproves a submission under section 110(k), for an area designated nonattainment under section 107, based on the submission's failure to meet one or more of the elements required by the provisions of this Act applicable to such an area,

“(3)(A) determines that a State has failed to make any submission as may be required under this Act, other than one described under paragraph (1) or (2), including an adequate maintenance plan, or has failed to make any submission, as may be required under this Act, other than one described under paragraph (1) or (2), that satisfies the minimum criteria established in relation to such submission under section 110(k)(1)(A), or

“(B) disapproves in whole or in part a submission described under subparagraph (A), or

“(4) finds that any requirement of an approved plan (or approved part of a plan) is not being implemented,

unless such deficiency has been corrected within 18 months after the finding, disapproval, or determination referred to in paragraph (1), (2), (3), and (4), one of the sanctions referred to in subsection (b) shall apply, as selected by the Administrator, until the Administrator determines that the State has come into compliance, except that if the Administrator finds a lack of good faith, both of such sanctions shall apply until the Administrator determines that the State has come into compliance. If the Administrator has selected one of such sanctions and the deficiency has not been corrected within 6 months thereafter, both of such sanctions shall apply until the Administrator determines that the State has come into compliance. In addition to any other sanction applicable as provided in this section, the Administrator may withhold all or part of the grants for support of air pollution planning and control programs that the Administrator may award under section 105.

“(b) Sanctions.—The sanctions referred to in subsection (a) are as follows:

“(1) Highway funds.—The Secretary of Transportation shall not approve any project or award any grant under title 23, United States Code, other than for safety or mass transit.

“(2) Offsets.—In applying the emissions offset requirements of section 173 to new or modified sources or emissions units for which a permit is required under part D, the ratio of emission reductions to increased emissions shall be at least 2 to 1.

“(c) Notice of Failure To Attain.—(1) As expeditiously as practicable after the applicable attainment date for any nonattainment area, but not later than 6 months after such date, the Administrator shall determine, based on the area's air quality as of the attainment date, whether the area attained the standard by that date.

“(2) Upon making the determination under paragraph (1), the Administrator shall publish a notice in the Federal Register containing such determination and identifying each area that the Administrator has determined to have failed to attain. The Administrator may revise or supplement such determination at any time based on more complete information or analysis concerning the area's air quality as of the attainment date.

“(d) Consequences for Failure To Attain.—(1) Within 1 year after the Administrator publishes the notice under subsection (c) (2) (relating to notice of failure to attain), each State containing a nonattainment area shall submit a revision to the applicable implementation plan meeting the requirements of paragraph (2) of this subsection.

“(2) The revision required under paragraph (1) shall meet the requirements of section 110 and section 172. In addition, the revision shall include such additional measures as the Administrator may reasonably prescribe, including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality-related health and environmental impacts.

“(3) The attainment date applicable to the revision required under paragraph (1) shall be the same as provided in the provisions of section 172(a)(2), except that in applying such provisions the phrase ‘from the date of the notice under section 179(c)(2)’ shall be substituted for the phrase ‘from the date such area was designated nonattainment under section 107(d)’ and for the phrase ‘from the date of designation as nonattainment’.”

(h) Federal Implementation Plans.—Section 110(c)(1) (42 U.S.C. 7410(c)) is amended to read as follows: “(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator—

“(A) finds that a State has failed to make a required submission or finds that the plan or plan revision submitted by the State does not satisfy the minimum criteria established under section 110(k)(1)(A), or

“(B) disapproves a State implementation plan submission in whole or in part.”.

SEC. 103. ADDITIONAL PROVISIONS FOR OZONE NONATTAINMENT AREAS.

Part D of title I is amended by adding the following new subpart at the end thereof:

“Subpart 2—Additional Provisions for Ozone Nonattainment Areas

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 181. CLASSIFICATIONS AND ATTAINMENT DATES.

“(a) Classification and Attainment Dates for 1989 Nonattainment Areas.—(1) Each area designated nonattainment for ozone pursuant to section 107(d) shall be classified at the time of such designation, under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the date of the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for ozone shall be as expeditiously as practicable but not later than the date provided in table 1.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(2) Notwithstanding table 1, in the case of a severe area with a 1988 ozone design value between 0.190 and 0.280 ppm, the attainment date shall be 17 years (in lieu of 15 years) after the date of the enactment of the Clean Air Amendments of 1990.

“(3) At the time of publication of the notice under section 107(d)(4) (relating to area designations) for each ozone nonattainment area, the Administrator shall publish a notice announcing the classification of such ozone nonattainment area. The provisions of section 172(a)(1)(B) (relating to lack of notice and comment and judicial review) shall apply to such classification.

“(4) If an area classified under paragraph (1) (Table 1) would have been classified in another category if the design value in the area were 5 percent greater or 5 percent less than the level on which such classification was based, the Administrator may, in the Administrator's discretion, within 90 days after the initial classification, by the procedure required under paragraph (3), adjust the classification to place the area in such other category. In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for ozone in the area, the level of pollution transport between the area and other affected areas, including both intrastate and interstate transport, and the mix of sources and air pollutants in the area.

“(5) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the ‘Extension Year’) the date specified in Table 1 of subsection (a) if—

“(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

“(B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

“(b) New Designations and Reclassifications.—

“(1) New designations to nonattainment.—Any area that is designated attainment or unclassifiable for ozone under section 107(d)(4), and that is subsequently redesignated to nonattainment for ozone under section 107(d)(3), shall, at the time of the redesignation, be classified by operation of law in accordance with Table 1 under subsection (a). Upon its classification, the area shall be subject to the same requirements under section 110, subpart 1 of this part, and this subpart that would have applied had the area been so classified at the time of the notice under subsection (a)(3), except that any absolute, fixed date applicable in connection with any such requirement is extended by operation of law by a period equal to the length of time between the date of the enactment of the Clean Air Act Amendments of 1990 and the date the area is classified under this paragraph.

“(2) Reclassification upon failure to attain.—(A) Within 6 months following the applicable attainment date (including any extension thereof) for an ozone nonattainment area, the Administrator shall determine, based on the area's design value (as of the attainment date), whether the area attained the standard by that date. Except for any Severe or Extreme area, any area that the Administrator finds has not attained the standard by that date shall be reclassified by operation of law in accordance with Table 1 of subsection (a) to the higher of—

“(i) the next higher classification for the area, or

“(ii) the classification applicable to the area's design value as determined at the time of the notice required under subparagraph (B).

No area shall be reclassified as Extreme under clause (ii).

“(B) The Administrator shall publish a notice in the Federal Register, no later than 6 months following the attainment date, identifying each area that the Administrator has determined under subparagraph (A) as having failed to attain and identifying the reclassification, if any, described under subparagraph (A).

“(3) Voluntary reclassification.—The Administrator shall grant the request of any State to reclassify a nonattainment area in that State in accordance with Table 1 of subsection (a) to a higher classification. The Administrator shall publish a notice in the Federal Register of any such request and of action by the Administrator granting the request.

“(4) Failure of severe areas to attain standard.—(A) If any Severe Area fails to achieve the national primary ambient air quality standard for ozone by the applicable attainment date (including any extension thereof), the fee provisions under section 185 shall apply within the area, the percent reduction requirements of section 182(c)(2)(B) and (C) (relating to reasonable further progress demonstration and NO₅x CONTROL) SHALL CONTINUE TO APPLY TO THE AREA, AND THE STATE SHALL DEMONSTRATE THAT SUCH PERCENT REDUCTION HAS BEEN ACHIEVED IN EACH 3-YEAR INTERVAL AFTER SUCH FAILURE UNTIL THE STANDARD IS ATTAINED. ANY FAILURE TO MAKE SUCH A DEMONSTRATION SHALL BE SUBJECT TO THE SANCTIONS PROVIDED UNDER THIS PART.

“(B) In addition to the requirements of subparagraph (A), if the ozone design value for a Severe Area referred to in subparagraph (A) is above 0.140 ppm for the year of the applicable attainment date, or if the area has failed to achieve its most recent milestone under section 182(g), the new source review requirements applicable under this subpart in Extreme Areas shall apply in the area and the term ‘major source’ and ‘major stationary source’ shall have the same meaning as in Extreme Areas.

“(C) In addition to the requirements of subparagraph (A) for those areas referred to in subparagraph (A) and not covered by subparagraph (B), the provisions referred to in subparagraph (B) shall apply after 3 years from the applicable attainment date unless the area has attained the standard by the end of such 3-year period.

“(D) If, after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator modifies the method of determining compliance with the national primary ambient air quality standard, a design value or other indicator comparable to 0.140 in terms of its relationship to the standard shall be used in lieu of 0.140 for purposes of applying the provisions of subparagraphs (B) and (C).

“(c) References to Terms.—(1) Any reference in this subpart to a ‘Marginal Area’, a ‘Moderate Area’, a ‘Serious Area’, a ‘Severe Area’, or an ‘Extreme Area’ shall be considered a reference to a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area as respectively classified under this section.

“(2) Any reference in this subpart to ‘next higher classification’ or comparable terms shall be considered a reference to the classification related to the next higher set of design values in Table 1.

“SEC. 182. PLAN SUBMISSIONS AND REQUIREMENTS.

“(a) Marginal Areas.—Each State in which all or part of a Marginal Area is located shall, with respect to the Marginal Area (or portion thereof, to the extent specified in this subsection), submit to the Administrator the State implementation plan revisions (including the plan items) described under this subsection except to the extent the State has made such submissions as of the date of the enactment of the Clean Air Act Amendments of 1990.

“(1) Inventory.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 172(c)(3), in accordance with guidance provided by the Administrator.

“(2) Corrections to the state implementation plan.—Within the periods prescribed in this paragraph, the State shall submit a revision to the State implementation plan that meets the following requirements—

“(A) Reasonably available control technology corrections.—For any Marginal Area (or, within the Administrator's discretion, portion thereof) the State shall submit, within 6 months of the date of classification under section 181(a), a revision that includes such provisions to correct requirements in (or add requirements to) the plan concerning reasonably available control technology as were required under section 172(b) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990), as interpreted in guidance issued by the Administrator under section 108 before the date of the enactment of the Clean Air Act Amendments of 1990.

“(B) Savings clause for vehicle inspection and maintenance.—(i) For any Marginal Area (or, within the Administrator's discretion, portion thereof), the plan for which already includes, or was required by section 172(b)(11)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to have included, a specific schedule for implementation of a vehicle emission control inspection and maintenance program, the State shall submit, immediately after the date of the enactment of the Clean Air Act Amendments of 1990, a revision that includes any provisions necessary to provide for a vehicle inspection and maintenance program of no less stringency than that of either the program defined in House Report Numbered 95–294, 95th Congress, 1st Session, 281–291 (1977) as interpreted in guidance of the Administrator issued pursuant to section 172(b)(11)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) or the program already included in the plan, whichever is more stringent.

“(ii) Within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall review, revise, update, and republish in the Federal Register the guidance for the States for motor vehicle inspection and maintenance programs required by this Act, taking into consideration the Administrator's investigations and audits of such program. The guidance shall, at a minimum, cover the frequency of inspections, the types of vehicles to be inspected (which shall include leased vehicles that are registered in the nonattainment area), vehicle maintenance by owners and operators, audits by the State, the test method and measures, including whether centralized or decentralized, inspection methods and procedures, quality of inspection, components covered, assurance that a vehicle subject to a recall notice from a manufacturer has complied with that notice, and effective implementation and enforcement, including ensuring that any retesting of a vehicle after a failure shall include proof of corrective action and providing for denial of vehicle registration in the case of tampering or misfueling. The guidance which shall be incorporated in the applicable State implementation plans by the States shall provide the States with continued reasonable flexibility to fashion effective, reasonable, and fair programs for the affected consumer. No later than 2 years after the Administrator promulgates regulations under section 202(m)(3) (relating to emission control diagnostics), the State shall submit a revision to such program to meet any requirements that the Administrator may prescribe under that section.

“(C) Permit programs.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision that includes each of the following:

“(i) Provisions to require permits, in accordance with sections 172(c)(5) and 173, for the construction and operation of each new or modified major stationary source (with respect to ozone) to be located in the area.

“(ii) Provisions to correct requirements in (or add requirements to) the plan concerning permit programs as were required under section 172(b)(6) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990), as interpreted in regulations of the Administrator promulgated as of the date of the enactment of the Clean Air Act Amendments of 1990.

“(3) Periodic inventory.—

“(A) General requirement.—No later than the end of each 3-year period after submission of the inventory under paragraph (1) until the area is redesignated to attainment, the State shall submit a revised inventory meeting the requirements of subsection (a)(1).

“(B) Emissions statements.—(i) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the State implementation plan to require that the owner or operator of each stationary source of oxides of nitrogen or volatile organic compounds provide the State with a statement, in such form as the Administrator may prescribe (or accept an equivalent alternative developed by the State), for classes or categories of sources, showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source. The first such statement shall be submitted within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. Subsequent statements shall be submitted at least every year thereafter. The statement shall contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

“(ii) The State may waive the application of subparagraph (A) to any class or category of stationary sources which emit less than 25 tons per year of volatile organic compounds or oxides of nitrogen if the State, in its submissions under subparagraphs (1) or (3)(A), provides an inventory of emissions from such class or category of sources, based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator.

“(4) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.1 to 1.

The Administrator may, in the Administrator's discretion, require States to submit a schedule for submitting any of the revisions or other items required under this subsection. The requirements of this subsection shall apply in lieu of any

requirement that the State submit a demonstration that the applicable implementation plan provides for attainment of the ozone standard by the applicable attainment date in any Marginal area. Section 172(c)(9) (relating to contingency measures) shall not apply to Marginal Areas.

“(b) Moderate Areas.—Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) (relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

“(1) Plan provisions for reasonable further progress.—

“(A) General rule.—(i) By no later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to provide for volatile organic compound emission reductions, within 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, of at least 15 percent from baseline emissions, accounting for any growth in emissions after the year in which the Clean Air Act Amendments of 1990 are enacted. Such plan shall provide for such specific annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this Act. This subparagraph shall not apply in the case of oxides of nitrogen for those areas for which the Administrator determines (when the Administrator approves the plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment.

“(ii) A percentage less than 15 percent may be used for purposes of clause (i) in the case of any State which demonstrates to the satisfaction of the Administrator that—

“(I) new source review provisions are applicable in the nonattainment areas in the same manner and to the same extent as required under subsection (e) in the case of Extreme Areas (with the exception that, in applying such provisions, the terms ‘major source’ and ‘major stationary source’ shall include (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 5 tons per year of volatile organic compounds);

“(II) reasonably available control technology is required for all existing major sources (as defined in subclause (I)); and

“(III) the plan reflecting a lesser percentage than 15 percent includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To qualify for a lesser percentage under this clause, a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher category.

“(B) Baseline emissions.—For purposes of subparagraph (A), the term ‘baseline emissions’ means the total amount of actual VOC or NO₅x EMISSIONS FROM ALL ANTHROPOGENIC SOURCES IN THE AREA DURING THE CALENDAR YEAR OF THE ENACTMENT OF THE CLEAN AIR ACT AMENDMENTS OF 1990, EXCLUDING EMISSIONS THAT WOULD BE ELIMINATED UNDER THE REGULATIONS DESCRIBED IN CLAUSES (I) AND (II) OF SUBPARAGRAPH (D).

“(C) General rule for creditability of reductions.—Except as provided under subparagraph (D), emissions reductions are creditable toward the 15 percent required under subparagraph (A) to the extent they have actually occurred, as of 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, from the implementation of measures required under the applicable implementation plan, rules promulgated by the Administrator, or a permit under title IV.

“(D) Limits on creditability of reductions.—Emission reductions from the following measures are not creditable toward the 15 percent reductions required under subparagraph (A):

“(i) Any measure relating to motor vehicle exhaust or evaporative emissions promulgated by the Administrator by January 1, 1990.

“(ii) Regulations concerning Reid Vapor Pressure promulgated by the Administrator by the date of the enactment of the Clean Air Act Amendments of 1990 or required to be promulgated under section 211(h).

“(iii) Measures required under subsection (a)(2)(A) (concerning corrections to implementation plans prescribed under guidance by the Administrator).

“(iv) Measures required under subsection (a)(2)(B) to be submitted immediately after the date of the enactment of the Clean Air Act Amendments of 1990 (concerning corrections to motor vehicle inspection and maintenance programs).

“(2) Reasonably available control technology.—The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 172(c)(1) with respect to each of the following:

“(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between the date of the enactment of the Clean Air Act Amendments of 1990 and the date of attainment.

“(B) All VOC sources in the area covered by any CTG issued before the date of the enactment of the Clean Air Act Amendments of 1990.

“(C) All other major stationary sources of VOCs that are located in the area.

Each revision described in subparagraph (A) shall be submitted within the period set forth by the Administrator in issuing the relevant CTG document. The revisions with respect to sources described in subparagraphs (B) and (C) shall be submitted by 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, and shall provide for the implementation of the required measures as expeditiously as practicable but no later than May 31, 1995.

“(3) Gasoline vapor recovery.—

“(A) General rule.—Not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to require all owners or operators of gasoline dispensing systems to install and operate, by the date prescribed under subparagraph (B), a system for gasoline vapor recovery of emissions from the fueling of motor vehicles. The Administrator shall issue guidance as appropriate as to the effectiveness of such system. This subparagraph shall apply only to facilities which sell more than 10,000 gallons of gasoline per month (50,000 gallons per month in the case of an independent small business marketer of gasoline as defined in section 325).

“(B) Effective date.—The date required under subparagraph (A) shall be—

“(i) 6 months after the adoption date, in the case of gasoline dispensing facilities for which construction commenced after the date of the enactment of the Clean Air Act Amendments of 1990;

“(ii) one year after the adoption date, in the case of gasoline dispensing facilities which dispense at least 100,000 gallons of gasoline per month, based on average monthly sales for the 2-year period before the adoption date; or

“(iii) 2 years after the adoption date, in the case of all other gasoline dispensing facilities.

Any gasoline dispensing facility described under both clause (i) and clause (ii) shall meet the requirements of clause (i).

“(C) Reference to terms.—For purposes of this paragraph, any reference to the term ‘adoption date’ shall be considered a reference to the date of adoption by the State of requirements for the installation and operation of a system for gasoline vapor recovery of emissions from the fueling of motor vehicles.

“(4) Motor vehicle inspection and maintenance.—For all Moderate Areas, the State shall submit, immediately after the date of the enactment of the Clean Air Act Amendments of 1990, a revision to the applicable implementation plan that

includes provisions necessary to provide for a vehicle inspection and maintenance program as described in subsection (a)(2) (B) (without regard to whether or not the area was required by section 172(b)(1)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to have included a specific schedule for implementation of such a program).

“(5) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.15 to 1.

“(c) Serious Areas.—Except as otherwise specified in paragraph (4), each State in which all or part of a Serious Area is located shall, with respect to the Serious Area (or portion thereof, to the extent specified in this subsection), make the submissions described under subsection (b) (relating to Moderate Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Serious Area, the terms ‘major source’ and ‘major stationary source’ include (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 50 tons per year of volatile organic compounds.

“(1) Enhanced monitoring.—In order to obtain more comprehensive and representative data on ozone air pollution, not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990 the Administrator shall promulgate rules, after notice and public comment, for enhanced monitoring of ozone, oxides of nitrogen, and volatile organic compounds. The rules shall, among other things, cover the location and maintenance of monitors. Immediately following the promulgation of rules by the Administrator relating to enhanced monitoring, the State shall commence such actions as may be necessary to adopt and implement a program based on such rules, to improve monitoring for ambient concentrations of ozone, oxides of nitrogen and volatile organic compounds and to improve monitoring of emissions of oxides of nitrogen and volatile organic compounds. Each State implementation plan for the area shall contain measures to improve the ambient monitoring of such air pollutants.

“(2) Attainment and reasonable further progress demonstrations.—Within 4 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan that includes each of the following:

“(A) Attainment demonstration.—A demonstration that the plan, as revised, will provide for attainment of the ozone national ambient air quality standard by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective.

“(B) Reasonable further progress demonstration.—A demonstration that the plan, as revised, will result in VOC emissions reductions from the baseline emissions described in subsection (b)(1)(B) equal to the following amount averaged over each consecutive 3-year period beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, until the attainment date:

“(i) at least 3 percent of baseline emissions each year; or

“(ii) an amount less than 3 percent of such baseline emissions each year, if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To lessen the 3 percent requirement under clause (ii), a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher classification. Any determination to lessen the 3 percent requirement shall be reviewed at each milestone under section 182(g) and revised to reflect such new measures (if any) achieved in practice by sources in the same category in any State, allowing a reasonable time to implement such measures. The emission reductions described in

this subparagraph shall be calculated in accordance with subsection (b)(1)(C) and (D) (concerning creditability of reductions). The reductions creditable for the period beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, shall include reductions that occurred before such period, computed in accordance with subsection (b)(1), that exceed the 15-percent amount of reductions required under subsection (b)(1)(A).

“(C) NO₅x control.—The revision may contain, in lieu of the demonstration required under subparagraph (B), a demonstration to the satisfaction of the Administrator that the applicable implementation plan, as revised, provides for reductions of emissions of VOC's and oxides of nitrogen (calculated according to the creditability provisions of subsection (b)(1) (C) and (D)), that would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required under subparagraph (B). Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue guidance concerning the conditions under which NO₅x CONTROL MAY BE SUBSTITUTED FOR VOC CONTROL OR MAY BE COMBINED WITH VOC CONTROL IN ORDER TO MAXIMIZE THE REDUCTION IN OZONE AIR POLLUTION. IN ACCORD WITH SUCH GUIDANCE, A LESSER PERCENTAGE OF VOCs MAY BE ACCEPTED AS AN ADEQUATE DEMONSTRATION FOR PURPOSES OF THIS SUBSECTION.

“(3) Enhanced vehicle inspection and maintenance program.—

“(A) Requirement for submission.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to provide for an enhanced program to reduce hydrocarbon emissions and NO₅x EMISSIONS FROM IN-USE MOTOR VEHICLES REGISTERED IN EACH URBANIZED AREA (IN THE NONATTAINMENT AREA), AS DEFINED BY THE BUREAU OF THE CENSUS, WITH A 1980 POPULATION OF 200,000 OR MORE.

“(B) Effective date of state programs; guidance.—The State program required under subparagraph (A) shall take effect no later than 2 years from the date of the enactment of the Clean Air Act Amendments of 1990, and shall comply in all respects with guidance published in the Federal Register (and from time to time revised) by the Administrator for enhanced vehicle inspection and maintenance programs. Such guidance shall include—

“(i) a performance standard achievable by a program combining emission testing, including on-road emission testing, with inspection to detect tampering with emission control devices and misfueling for all light-duty vehicles and all light-duty trucks subject to standards under section 202; and

“(ii) program administration features necessary to reasonably assure that adequate management resources, tools, and practices are in place to attain and maintain the performance standard.

Compliance with the performance standard under clause (i) shall be determined using a method to be established by the Administrator.

“(C) State program.—The State program required under subparagraph (A) shall include, at a minimum, each of the following elements—

“(i) Computerized emission analyzers, including on-road testing devices.

“(ii) No waivers for vehicles and parts covered by the emission control performance warranty as provided for in section 207(b) unless a warranty remedy has been denied in writing, or for tampering-related repairs.

“(iii) In view of the air quality purpose of the program, if, for any vehicle, waivers are permitted for emissions-related repairs not covered by warranty, an expenditure to qualify for the waiver of an amount of \$450 or more for such repairs (adjusted annually as determined by the Administrator on the basis of the Consumer Price Index in the same manner as provided in title IV).

“(iv) Enforcement through denial of vehicle registration (except for any program in operation before the date of the enactment of the Clean Air Act Amendments of 1990 whose enforcement mechanism is demonstrated to the Administrator

to be more effective than the applicable vehicle registration program in assuring that noncomplying vehicles are not operated on public roads).

“(v) Annual emission testing and necessary adjustment, repair, and maintenance, unless the State demonstrates to the satisfaction of the Administrator that a biennial inspection, in combination with other features of the program which exceed the requirements of this Act, will result in emission reductions which equal or exceed the reductions which can be obtained through such annual inspections.

“(vi) Operation of the program on a centralized basis, unless the State demonstrates to the satisfaction of the Administrator that a decentralized program will be equally effective. An electronically connected testing system, a licensing system, or other measures (or any combination thereof) may be considered, in accordance with criteria established by the Administrator, as equally effective for such purposes.

“(vii) Inspection of emission control diagnostic systems and the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems.

Each State shall biennially prepare a report to the Administrator which assesses the emission reductions achieved by the program required under this paragraph based on data collected during inspection and repair of vehicles. The methods used to assess the emission reductions shall be those established by the Administrator.

“(4) Clean-fuel vehicle programs.—(A) Except to the extent that substitute provisions have been approved by the Administrator under subparagraph (B), the State shall submit to the Administrator, within 42 months of the date of the enactment of the Clean Air Act Amendments of 1990, a revision to the applicable implementation plan for each area described under section 212 to include such measures as may be necessary to ensure the effectiveness of the applicable provisions of the clean-fuel vehicle program prescribed under section 212, including all measures necessary to make the use of clean alternative fuels in clean-fuel vehicles (as defined in section 216) economic from the standpoint of vehicle owners. Such a revision shall also be submitted for each area that opts into the clean fuel-vehicle program as provided in section 212.

“(B) The Administrator shall approve, as a substitute for all or a portion of the clean-fuel vehicle program prescribed under section 212, any revision to the relevant applicable implementation plan that in the Administrator's judgment will achieve long-term reductions in ozone-producing and toxic air emissions equal to those achieved under section 212, or the percentage thereof attributable to the portion of the clean-fuel vehicle program for which the revision is to substitute. The Administrator may approve such revision only if it consists exclusively of provisions other than those required under this Act for the area. Any State seeking approval of such revision must submit the revision to the Administrator within 24 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall approve or disapprove any such revision within 30 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall publish the revision submitted by a State in the Federal Register upon receipt. Such notice shall constitute a notice of proposed rulemaking on whether or not to approve such revision and shall be deemed to comply with the requirements concerning notices of proposed rulemaking contained in sections 553 through 557 of title 5 of the United States Code (related to notice and comment). Where the Administrator approves such revision for any area, the State need not submit the revision required by subparagraph (A) for the area with respect to the portions of the Federal clean-fuel vehicle program for which the Administrator has approved the revision as a substitute.

“(C) Where the Administrator approves under section 214 any market-based alternative emissions reduction plan applicable in an area, the Administrator may approve a plan revision for the area providing for changes to the plan provisions otherwise required by this paragraph to ensure consistency with such alternative emissions reduction plan.

“(D) If the Administrator determines, under section 179, that the State has failed to submit any portion of the program required under subparagraph (A), then, in addition to any sanctions available under section 179, the State may not receive credit, in any demonstration of attainment or reasonable further progress for the area, for any emission reductions from implementation of the corresponding aspects of the Federal clean-fuel vehicle requirements established in section 212.

“(5) Transportation control.—(A) Beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990 and each third year thereafter, the State shall submit a demonstration as to whether current aggregate vehicle mileage, aggregate vehicle emissions, congestion levels, and other relevant parameters are consistent with those used for the area's demonstration of attainment. Where such parameters and emissions levels exceed the levels projected for purposes of the area's attainment demonstration, the State shall within 18 months develop and submit a revision of the applicable implementation plan that includes a transportation control measures program consisting of measures that will reduce emissions to levels that are consistent with emissions levels projected in such demonstration. The revision shall be developed in accordance with guidance issued by the Administrator pursuant to section 108(f) and shall include implementation and funding schedules that achieve expeditious emissions reductions in accordance with implementation plan projections. In the alternative, the State may offset the impact of increased vehicle miles traveled and congestion levels by implementing other controls on other source categories that will produce reductions comparable to those that would be achieved by implementation of such transportation demand management program, consistent with the emission reduction schedules in the plan.

“(B) Any plan revision under this subsection shall include measures to reduce congestion, including passenger vehicle trips and miles traveled per trip.

“(6) De minimis rule.—The new source review provisions under this part shall ensure that increased emissions of volatile organic compounds resulting from any physical change in, or change in the method of operation of, a stationary source located in the area shall not be considered de minimis for purposes of determining the applicability of the permit requirements established by this Act unless the increase in net emissions of such air pollutant from such source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years which includes the calendar year in which such increase occurred.

“(7) Special rule for modifications of sources emitting less than 100 tons.—In the case of any major stationary source of volatile organic compounds located in the area (other than a source which emits or has the potential to emit 100 tons or more of volatile organic compounds per year), whenever any change (as described in section 111(a)(4)) at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that such increase shall not be considered a modification for such purposes if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds concerned from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such election, such change shall be considered a modification for such purposes, but in applying section 173(a)(2) in the case of any such modification, the best available control technology (BACT), as defined in section 169, shall be substituted for the lowest achievable emission rate (LAER). The Administrator shall establish and publish policies and procedures for implementing the provisions of this paragraph.

“(8) Special rule for modifications of sources emitting 100 tons or more.—In the case of any major stationary source of volatile organic compounds located in the area which emits or has the potential to emit 100 tons or more of volatile organic compounds per year, whenever any change (as described in section 111(a)(4)) at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of section 173(a)(2) (concerning the lowest achievable emission rate (LAER)) shall not apply.

“(9) Contingency provisions.—In addition to the contingency provisions required under section 172(c)(9), the plan revision shall provide for the implementation of specific measures to be undertaken if the area fails to meet any applicable milestone.

Such measures shall be included in the plan revision as contingency measures to take effect without further action by the State or the Administrator upon a failure by the State to meet the applicable milestone.

“(10) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.2 to 1.

Any reference to ‘attainment date’ in subsection (b), which is incorporated by reference into this subsection, shall refer to the attainment date for serious areas.

“(d) Severe Areas.—Each State in which all or part of a Severe Area is located shall, with respect to the Severe Area, make the submissions described under subsection (c) (relating to Serious Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Severe Area, the terms ‘major source’ and ‘major stationary source’ include (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 25 tons per year of volatile organic compounds.

“(1) Vehicle miles traveled.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision that includes all reasonably available techniques for reducing aggregate vehicle emissions and, at a minimum, identifies and adopts specific enforceable strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area. The State shall consider, at a minimum, measures specified in section 108(f). If the State fails to include any such measure, the implementation plan shall contain an explanation of why such measure was not adopted and what emissions reduction measure was adopted to provide a comparable reduction in emissions, or reasons why such reduction is not necessary to attain the national primary ambient air quality standard for ozone.

“(2) Offset requirement.—For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.3 to 1, except that if the State plan requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 169(3)) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

“(3) Enforcement under section 185.—By December 31, 2000, the State shall submit a plan revision which includes the provisions required under section 185.

Any reference to the term ‘attainment date’ in subsection (b) or (c), which is incorporated by reference into this subsection (d), shall refer to the attainment date for Severe Areas.

“(e) Extreme Areas.—Each State in which all or part of an Extreme Area is located shall, with respect to the Extreme Area, make the submissions described under subsection (d) (relating to Severe Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. The provisions of clause (ii) of subsection (c)(2)(B) (relating to reductions of less than 3 percent) and the provisions of clause (ii) of subsection (b)(1)(A) (relating to reductions of less than 15 percent) shall not apply in the case of an Extreme Area. For any Extreme Area, the terms ‘major source’ and ‘major stationary source’ includes (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 10 tons per year of volatile organic compounds.

“(1) Offset requirement.—For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.5 to 1, except that if the State plan requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 169(3)) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

“(2) Modifications—Any change (as described in section 111(a)(4)) at a major stationary source which results in any increase in emissions from any discrete operation, unit, or other pollutant emitting activity at the source shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that for purposes of complying with the offset requirement pursuant to section 173(a)(1), any such increase shall not be considered a modification if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of the air pollutant concerned from other discrete operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. The offset requirements of this part shall not be applicable in Extreme Areas to a modification of an existing source if such modification consists of installation of equipment required to comply with the applicable implementation plan, permit, or this Act.

“(3) Use of clean fuels or advanced control technology.—For Extreme Areas, a plan revision shall be submitted within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990 to require, effective 8 years after such date, that each new, modified, and existing electric utility and industrial and commercial boiler which emits more than 25 tons per year of oxides of nitrogen—

“(A) burn as its primary fuel natural gas, methanol, or ethanol (or a comparably low polluting fuel), or

“(B) use advanced control technology (such as catalytic control technology or other comparably effective control methods) for reduction of emissions of oxides of nitrogen.

For purposes of this subsection, the term ‘primary fuel’ means the fuel which is used 90 percent or more of the operating time. This paragraph shall not apply during any natural gas supply emergency (as defined in title III of the Natural Gas Policy Act of 1978).

“(4) Traffic control measures during heavy traffic hours.—For Extreme Areas, each implementation plan revision under this subsection may contain provisions establishing traffic control measures applicable during heavy traffic hours to reduce the use of high polluting vehicles or heavy-duty vehicles, notwithstanding any other provision of law.

“(5) New technologies.—The Administrator may, in accordance with section 110, approve provisions of an implementation plan for an Extreme Area which anticipate development of new control techniques or improvement of existing control technologies, and an attainment demonstration based on such provisions, if the State demonstrates to the satisfaction of the Administrator that—

“(A) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after the date of the enactment of the Clean Air Act Amendments of 1990; and

“(B) the State has submitted enforceable commitments to develop and adopt contingency measures to be implemented as set forth herein if the anticipated technologies do not achieve planned reductions.

Such contingency measures shall be submitted to the Administrator no later than 3 years before proposed implementation of the plan provisions and approved or disapproved by the Administrator in accordance with section 110. The contingency measures shall be adequate to produce emission reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emission reductions required by subsection (b)(1) or (c)(2) and attainment by the applicable dates. If the Administrator determines that an Extreme area has failed to achieve an emission reduction requirement set forth in subsection (b)(1) or (c)(2), and that such failure is due in whole or part to an inability to fully implement provisions approved pursuant to this subsection, the Administrator shall require the State to implement the contingency measures to the extent necessary to assure compliance with subsections (b)(1) and (c)(2).

Any reference to the term 'attainment date' in subsection (b), (c), or (d) which is incorporated by reference into this subsection, shall refer to the attainment date for Extreme Areas.

“(f) NO₅x REQUIREMENTS.—The plan provisions required under this subpart for major stationary sources of volatile organic compounds shall also apply to major stationary sources (as defined in section 302 and subsections (c), (d), and (e) of this section) of oxides of nitrogen. This subsection shall not apply in the case of oxides of nitrogen for those sources for which the Administrator determines (when the Administrator approves a plan or plan revision) that net air quality benefits are greater in the absence of reductions of oxides of nitrogen from the sources concerned. This subsection shall also not apply in the case of oxides of nitrogen for—

“(1) nonattainment areas not within an ozone transport region under section 184 if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment of the national ambient air quality standard for ozone in the area, or

“(2) nonattainment areas within such an ozone transport region if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not produce net ozone air quality benefits in such region.

“(g) Milestones.—

“(1) Reductions in emissions.—6 years after the date of the enactment of the Clean Air Amendments of 1990 and at intervals of every 3 years after, the State shall determine whether each nonattainment area (other than an area classified as Marginal or Moderate) has achieved a reduction in emissions during the preceding intervals equivalent to the total emission reductions required to be achieved by the end of such interval pursuant to subsection (b)(1) and the corresponding requirements of subsections (c)(2)(B) and (C), (d), and (e). Such reduction shall be referred to in this section as an applicable milestone.

“(2) Compliance demonstration.—For each nonattainment area referred to in paragraph (1), not later than 90 days after the date on which an applicable milestone occurs (not including an attainment date on which a milestone occurs in cases where the standard has been attained), each State in which all or part of such area is located shall submit to the Administrator a demonstration that the milestone has been met. A demonstration under this paragraph shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require, by rule. The Administrator shall determine whether or not a State's demonstration is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

“(3) Serious and severe areas; state election.—If a State fails to submit a demonstration under paragraph (2) for any Serious or Severe area within the required period or if the Administrator determines that the area has not met any applicable milestone, the State shall elect, within 90 days after such failure or determination—

“(A) to have the area reclassified to the next higher classification,

“(B) to implement specific additional measures adequate, as determined by the Administrator, to meet the next milestone as provided in the applicable contingency plan, or

“(C) to adopt an economic incentive program as described in paragraph (4).

If the State makes an election under subparagraph (B), the Administrator shall, within 90 days after the election, review such plan and shall, if the Administrator finds the contingency plan inadequate, require further measures necessary to meet such milestone. Once the State makes an election, it shall be deemed accepted by the Administrator as meeting the election requirement. If the State fails to make an election required under this paragraph within the required 90-day period or within 6

months thereafter, the area shall be reclassified to the next higher classification by operation of law at the expiration of such 6-month period. Within 12 months after the date required for the State to make an election, the State shall submit a revision of the applicable implementation plan for the area that meets the requirements of this paragraph. The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

“(4) Economic incentive program.—(A) An economic incentive program under this paragraph shall be consistent with rules published by the Administrator and sufficient, in combination with other elements of the State plan, to achieve the next milestone. The State program may include a nondiscriminatory system, consistent with applicable law regarding interstate commerce, of State established emissions fees or a system of marketable permits, or a system of State fees on sale, import, or manufacture of products the use of which contributes to ozone formation, or any combination of the foregoing or other similar measures. The program may also include incentives and requirements to reduce vehicle emissions and vehicle miles traveled in the area, including any of the transportation control measures identified in section 108(f) .

“(B) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish rules for the programs to be adopted pursuant to subparagraph (A). Such rules shall include model plan provisions which may be adopted for reducing emissions from permitted stationary sources, area sources, and mobile sources. The guidelines shall require that any revenues generated by the plan provisions adopted pursuant to subparagraph (A) shall be used by the State for any of the following:

“(i) Providing incentives for achieving emission reductions.

“(ii) Providing assistance for the development of innovative technologies for the control of ozone air pollution and for the development of lower-polluting solvents and surface coatings. Such assistance shall not provide for the payment of more than 75 percent of either the costs of any project to develop such a technology or the costs of development of a lower-polluting solvent or surface coating.

“(iii) Funding the administrative costs of State programs under this Act. Not more than 50 percent of such revenues may be used for purposes of this clause.

“(5) Extreme areas.—If a State fails to submit a demonstration under paragraph (2) for any Extreme Area within the required period, or if the Administrator determines that the area has not met any applicable milestone, the State shall, within 9 months after such failure or determination, submit a plan revision to implement an economic incentive program which meets the requirements of paragraph (4). The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

“(h) Rural Transport Areas.—(1) Notwithstanding any other provision of section 181 or this section, a State containing an ozone nonattainment area that does not include, and is not adjacent to, any part of a Metropolitan Statistical Area or, where one exists, a Consolidated Metropolitan Statistical Area (as defined by the United States Bureau of the Census), which area is treated by the Administrator, in the Administrator's discretion, as a rural transport area within the meaning of paragraph (2), shall be treated by operation of law as satisfying the requirements of this section if it makes the submissions required under subsection (a) of this section (relating to marginal areas).

“(2) The Administrator may treat an ozone nonattainment area as a rural transport area if the Administrator finds that sources of VOC (and, where the Administrator determines relevant, NO₅x) EMISSIONS WITHIN THE AREA DO NOT MAKE A SIGNIFICANT CONTRIBUTION TO THE OZONE CONCENTRATIONS MEASURED IN THE AREA OR IN OTHER AREAS.

“(i) Reclassified Areas.—Each State containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet such requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified, according

to the schedules prescribed in connection with such requirements, except that the Administrator may adjust any applicable deadlines (other than attainment dates) to the extent such adjustment is necessary or appropriate to assure consistency among the required submissions.

“(j) Multi-State Ozone Nonattainment Areas.—

“(1) Coordination among states.—Each State in which there is located a portion of a single ozone nonattainment area which covers more than one State (hereinafter in this section referred to as a ‘multi-State ozone nonattainment area’) shall—

“(A) take all reasonable steps to coordinate, substantively and procedurally, the revisions and implementation of State implementation plans applicable to the nonattainment area concerned; and

“(B) use photochemical grid modeling or any other analytical method determined by the Administrator, in his discretion, to be at least as effective.

The Administrator may not approve any revision of a State implementation plan submitted under this part for a State in which part of a multi-State ozone nonattainment area is located if the plan revision for that State fails to comply with the requirements of this subsection.

“(2) Failure to demonstrate attainment.—If any State in which there is located a portion of a multi-State ozone nonattainment area fails to provide a demonstration of attainment of the national ambient air quality standard for ozone in that portion within the required period, the State may petition the Administrator to make a finding that the State would have been able to make such demonstration but for the failure of one or more other States in which other portions of the area are located to commit to the implementation of all measures required under section 182 (relating to plan submissions and requirements for ozone nonattainment areas). If the Administrator makes such finding, the provisions of section 179 (relating to sanctions) shall not apply, by reason of the failure to make such demonstration, in the portion of the multi-State ozone nonattainment area within the State submitting such petition.

“SEC. 183. FEDERAL OZONE MEASURES.

“(a) Control Techniques guidelines for VOC Sources.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines, in accordance with section 108, for 11 categories of stationary sources of VOC emissions for which such guidelines have not been issued as of such date of enactment, not including the categories referred to in paragraphs (3) and (4) of subsection (b) of this section. The Administrator may issue such additional control techniques guidelines as the Administrator deems necessary.

“(b) Existing and New CTGS.—(1) Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, and periodically thereafter, the Administrator shall review and, if necessary, update control technique guidance issued under section 108 before the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) In issuing the guidelines the Administrator shall give priority to those categories which the Administrator considers to make the most significant contribution to the formation of ozone air pollution in ozone nonattainment areas, including hazardous waste treatment, storage, and disposal facilities which are permitted under subtitle C of the Solid Waste Disposal Act. Thereafter the Administrator shall periodically review and, if necessary, revise such guidelines.

“(3) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines in accordance with section 108 to reduce the aggregate emissions of volatile organic compounds into the ambient air from aerospace coatings and solvents. Such control techniques guidelines shall, at a minimum, be adequate to reduce aggregate emissions of volatile organic compounds into the ambient air from the application of such coatings

and solvents to such level as the Administrator determines may be achieved through the adoption of best available control measures. Such control technology guidance shall provide for such reductions in such increments and on such schedules as the Administrator determines to be reasonable, but in no event later than 10 years after the final issuance of such control technology guidance. In developing control technology guidance under this subsection, the Administrator shall consult with the Secretary of Defense, the Secretary of Transportation, and the Administrator of the National Aeronautics and Space Administration with regard to the establishment of specifications for such coatings. In evaluating VOC reduction strategies, the guidance shall take into account the applicable requirements of section 112 and the need to protect stratospheric ozone.

“(4) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines in accordance with section 108 to reduce the aggregate emissions of volatile organic compounds and PM-10 into the ambient air from paints, coatings, and solvents used in shipbuilding operations and ship repair. Such control techniques guidelines shall, at a minimum, be adequate to reduce aggregate emissions of volatile organic compounds and PM-10 into the ambient air from the removal or application of such paints, coatings, and solvents to such level as the Administrator determines may be achieved through the adoption of the best available control measures. Such control techniques guidelines shall provide for such reductions in such increments and on such schedules as the Administrator determines to be reasonable, but in no event later than 10 years after the final issuance of such control technology guidance. In developing control techniques guidelines under this subsection, the Administrator shall consult with the appropriate Federal agencies.

“(c) Alternative Control Techniques.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue technical documents which identify alternative controls for all categories of stationary sources of volatile organic compounds and oxides of nitrogen which emit, or have the potential to emit 25 tons per year or more of such air pollutant. The Administrator shall revise and update such documents as the Administrator determines necessary.

“(d) Guidance for Evaluating Cost-Effectiveness.—Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall provide guidance to the States to be used in evaluating the relative cost-effectiveness of various options for the control of emissions from existing stationary sources of air pollutants which contribute to nonattainment of the national ambient air quality standards for ozone.

“(e) Control of Emissions From Certain Sources.—

“(1) Definitions.—For purposes of this subsection—

“(A) Best available controls.—The term ‘best available controls’ means the degree of emissions reduction that the Administrator determines, on the basis of technological and economic feasibility, health, environmental, and energy impacts, is achievable through the application of the most effective equipment, measures, processes, methods, systems or techniques, including chemical reformulation, product or feedstock substitution, repackaging, and directions for use, consumption, storage, or disposal.

“(B) Consumer or commercial product.—The term ‘consumer or commercial product’ means any substance, product (including paints, coatings, and solvents), or article (including any container or packaging) held by any person, the use, consumption, storage, disposal, destruction, or decomposition of which may result in the release of volatile organic compounds. The term does not include fuels or fuel additives regulated under section 211, or motor vehicles, non-road vehicles, and non-road engines as defined under section 216.

“(C) Regulated entities.—The term ‘regulated entities’ means—

“(i) manufacturers, processors, wholesale distributors, or importers of consumer or commercial products for sale or distribution in interstate commerce in the United States; or

“(ii) manufacturers, processors, wholesale distributors, or importers that supply the entities listed under clause (i) with such products for sale or distribution in interstate commerce in the United States.

“(2) Study and report.—

“(A) Study.—The Administrator shall conduct a study of the emissions of volatile organic compounds into the ambient air from consumer and commercial products (or any combination thereof) in order to—

“(i) determine their potential to contribute to ozone levels which violate the national ambient air quality standard for ozone; and

“(ii) establish criteria for selecting consumer and commercial products or classes or categories thereof which shall be subject to control under this subsection.

The study shall be completed and a report submitted to Congress not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(B) Consideration of certain factors.—In establishing the criteria under subparagraph (A)(ii), the Administrator shall take into consideration each of the following:

“(i) The uses, benefits, and commercial demand of consumer and commercial products.

“(ii) The health or safety functions (if any) served by such consumer and commercial products.

“(iii) Those consumer and commercial products which emit highly reactive volatile organic compounds into the ambient air.

“(iv) Those consumer and commercial products which are subject to the most cost-effective controls.

“(v) The availability of alternatives (if any) to such consumer and commercial products which are of comparable costs, considering health, safety, and environmental impacts.

“(3) Regulations to require emission reductions.—

“(A) In general.—Upon submission of the final report referred to in paragraph (2), and from time to time thereafter, the Administrator shall propose regulations for the control of any VOCs from consumer and commercial products which, in the Administrator's judgment, emit volatile organic compounds into the ambient air that may reasonably be anticipated to contribute to ozone levels that violate the national primary ambient air quality standard for ozone. Such regulations shall take into account the technical feasibility, the costs of achieving such control, the lead time required for such control, and competition. Such regulations may exempt health use products for which the Administrator, in consultation with the Commissioner of the Food and Drug Administration determines there are no suitable substitute. In order to carry out this section, the Administrator may, by regulation, control or prohibit any activity, including the manufacture or introduction into commerce, offering for sale, or sale of any consumer or commercial product which results in emission of volatile organic compounds into the ambient air. Not later than one year after proposal of regulations under this subsection, the Administrator shall promulgate such regulations. From time to time, and under the same procedures, the Administrator may revise any of the regulations promulgated under this subsection.

“(B) Regulated entities.—Regulations under this subsection may be imposed only with respect to regulated entities.

“(C) Use of ctgs.—For any consumer or commercial product the Administrator may issue control techniques guidelines under this Act in lieu of regulations required under subparagraph (A) if the Administrator determines that such guidance will be substantially as effective as regulations in reducing emissions of volatile organic compounds which contribute to ozone levels in areas which violate the national ambient air quality standard for ozone.

“(4) Best available controls.—Upon submission of the final report under paragraph (2), the Administrator shall list all categories of commercial or consumer products which release significant evaporative emissions of VOCs. At such time the Administrator shall divide the list into 4 groups establishing priorities for regulation based on the factors listed in paragraph

(2). Every 2 years after promulgating such list the Administrator shall regulate one group of categories until all 4 groups are regulated. The regulations shall require best available controls.

“(5) Systems of regulation.—The regulations under this subsection may include any system or systems of regulation as the Administrator may deem appropriate, including requirements for registration and labeling, self-monitoring and reporting, prohibitions, limitations, or reasonable fees, charges, and other economic incentives (including marketable permits and auctions of emissions rights) concerning the manufacture, processing, distribution, use, consumption, or disposal of the product.

“(6) Fees, etc.—Any fees, charges, or other funds established and collected by the Administrator under such regulations shall be deposited in a special fund in the United States Treasury for licensing and other services, which thereafter shall be available until expended, subject to annual appropriation Acts, solely to carry out the activities of the Administrator for which such fees, charges, or collections are established or made.

“(7) Enforcement.—Any regulation established under this subsection shall be treated, for purposes of enforcement of this Act, as a standard under section 111 and any violation of such regulation shall be treated as a violation of a requirement of section 111(e).

“(8) State administration.—Each State may develop and submit to the Administrator a procedure under State law for implementing and enforcing regulations promulgated under this subsection. If the Administrator finds the State procedure is adequate, the Administrator shall approve such procedure. Nothing in this paragraph shall prohibit the Administrator from enforcing any applicable regulations under this subsection.

“(9) Size, etc.—No regulations regarding the size, shape, or labeling of a product may be promulgated, unless the Administrator determines such regulations to be useful in meeting any national ambient air quality standard.

“(10) State consultation.—Any State which proposes regulations other than those adopted under this subsection shall consult with the Administrator regarding whether any other State or local subdivision has promulgated or is promulgating regulations on any products covered under this part. The Administrator shall establish a clearinghouse of information, studies, and regulations proposed and promulgated regarding products covered under this subsection and disseminate such information collected as requested by State or local subdivisions.

“(f) Marine Vessel Standards.—

“(1) Schedule for standards.—(A) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards applicable to the emission of VOCs and any other air pollutant from loading and unloading of marine tank vessels which the Administrator finds causes, or contributes to, air pollution that may be reasonably anticipated to endanger public health or welfare. Such standards shall require the application of reasonably available control technology, considering costs, any nonair-quality benefits, environmental impacts, energy requirements and safety factors associated with alternative control techniques. To the extent practicable such standards shall apply to loading and unloading facilities and not to marine vessels.

“(B) Any regulation prescribed under this subsection (and any revision thereof) shall take effect after such period as the Administrator finds (after consultation with the Secretary of the department in which the Coast Guard is operating) necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period, except that the effective date shall not be more than 2 years after promulgation of such regulations.

“(2) Regulations on equipment safety.—Within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Secretary of the Department in which the Coast Guard is operating shall issue regulations to ensure the safety of the equipment and operations which are to control emissions from the loading and unloading of marine tank vessels, under section 3703 of title 46 of the United States Code and section 6 of the Ports and Waterways Safety Act (33 U.S.C. 1225). The regulations issued by a State or political subdivision regarding emissions from the loading and unloading of marine tank vessels shall be consistent with the regulations regarding safety of the Department in which the Coast Guard is operating.

“(3) Agency authority.—(A) The Administrator shall ensure compliance with the vessel emission standards prescribed under paragraph (1)(A).

“(B) The Secretary of the Department in which the Coast Guard is operating shall ensure compliance with the regulations issued under paragraph (2).

“(4) State or local standards.—After the Administrator promulgates standards under this section, no State or political subdivision thereof may adopt or attempt to enforce any standard respecting emissions from marine vessels subject to regulation under paragraph (1) unless such standard is no less stringent than the standards promulgated under paragraph (1).

“(5) Enforcement.—Any standard established under paragraph (1)(A) shall be treated, for purposes of enforcement of this Act, as a standard under section 111 and any violation of such standard shall be treated as a violation of a requirement of section 111(e).

“(g) Ozone Design Value Study.—The Administrator shall conduct a study of whether the methodology in use by the Environmental Protection Agency as of the date of the enactment of the Clean Air Act Amendments of 1990 for establishing a design value for ozone provides a reasonable indicator of the ozone air quality of ozone nonattainment areas. The Administrator shall obtain input from States, local subdivisions thereof, and others. The study shall be completed and a report submitted to Congress not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. The results of the study shall be subject to peer and public review before submitting it to Congress.

“SEC. 184. CONTROL OF INTERSTATE OZONE AIR POLLUTION.

“(a) Ozone Transport Regions.—A single transport region for ozone (within the meaning of section 176A(a)), comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia, is hereby established by operation of law. The provisions of section 176A(a) (1) and (2) shall apply with respect to the transport region established under this section and any other transport region established for ozone, except to the extent inconsistent with the provisions of this section. The Administrator shall convene the commission required (under section 176A(b)) as a result of the establishment of such region within 6 months of the date of the enactment of the Clean Air Act Amendments of 1990.

“(b) Plan Provisions for States in Ozone Transport Regions.—(1) In accordance with section 110, not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 (or 9 months after the subsequent inclusion of a State in a transport region established for ozone), each State included within a transport region established for ozone shall submit a State implementation plan or revision thereof to the Administrator which requires the following—

“(A) that each area in such State that is in an ozone transport region, and that is a metropolitan statistical area or part thereof with a population of 100,000 or more comply with the provisions of section 182(c)(2)(A) (pertaining to enhanced vehicle inspection and maintenance programs); and

“(B) implementation of reasonably available control technology with respect to all sources of volatile organic compounds in the State covered by a control techniques guideline issued before or after the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study identifying control measures capable of achieving emission reductions comparable to those achievable through vehicle refueling controls contained in section 182(b)(3), and such measures or such vehicle refueling controls shall be implemented in accordance with the provisions of this section. Notwithstanding other deadlines in this section, the applicable implementation plan shall be revised to reflect such measures within 1 year of completion of the study. For purposes of this section any stationary source that emits or has the potential to emit at least 50 tons per year of volatile organic compounds shall be considered a major stationary source and subject to the requirements which would be applicable to major stationary sources if the area were classified as a Moderate nonattainment area.

“(c) Additional Control Measures.—

“(1) Recommendations.—Upon petition of any State within a transport region established for ozone, and based on a majority vote of the Governors on the Commission (or their designees), the Commission may, after notice and opportunity for public comment, develop recommendations for additional control measures to be applied within all or a part of such transport region if the commission determines such measures are necessary to bring any area in such region into attainment by the dates provided by this subpart. The commission shall transmit such recommendations to the Administrator.

“(2) Notice and review.—Whenever the Administrator receives recommendations prepared by a commission pursuant to paragraph (1) (the date of receipt of which shall hereinafter in this section be referred to as the ‘receipt date’), the Administrator shall—

“(A) immediately publish in the Federal Register a notice stating that the recommendations are available and provide an opportunity for public hearing within 90 days beginning on the receipt date; and

“(B) commence a review of the recommendations to determine whether the control measures in the recommendations are necessary to bring any area in such region into attainment by the dates provided by this subpart and are otherwise consistent with this Act.

“(3) Consultation.—In undertaking the review required under paragraph (2)(B), the Administrator shall consult with members of the commission of the affected States and shall take into account the data, views, and comments received pursuant to paragraph (2)(A).

“(4) Approval and disapproval.—Within 9 months after the receipt date, the Administrator shall (A) determine whether to approve, disapprove, or partially disapprove and partially approve the recommendations; (B) notify the commission in writing of such approval, disapproval, or partial disapproval; and (C) publish such determination in the Federal Register. If the Administrator disapproves or partially disapproves the recommendations, the Administrator shall specify—

“(i) why any disapproved additional control measures are not necessary to bring any area in such region into attainment by the dates provided by this subpart or are otherwise not consistent with the Act; and

“(ii) recommendations concerning equal or more effective actions that could be taken by the commission to conform the disapproved portion of the recommendations to the requirements of this section.

“(5) Finding.—Upon approval or partial approval of recommendations submitted by a commission, the Administrator shall issue to each State which is included in the transport region and to which a requirement of the approved plan applies, a finding

under section 110(k)(5) that the implementation plan for such State is inadequate to meet the requirements of section 110(a)(2)(D). Such finding shall require each such State to revise its implementation plan to include the approved additional control measures within one year after the finding is issued.

“(d) Best Available Air Quality Monitoring and Modeling.—For purposes of this section, not later than 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate criteria for purposes of determining the contribution of sources in one area to concentrations of ozone in another area which is a nonattainment area for ozone. Such criteria shall require that the best available air quality monitoring and modeling techniques be used for purposes of making such determinations.

“SEC. 185. ENFORCEMENT FOR SEVERE AND EXTREME OZONE NONATTAINMENT AREAS FOR FAILURE TO ATTAIN.

“(a) General Rule.—Each implementation plan revision required under section 182(d) and (e) (relating to the attainment plan for Severe and Extreme ozone nonattainment areas) shall provide that, if the area to which such plan revision applies has failed to attain the national primary ambient in quality standard for ozone by the applicable attainment date, each major stationary source of VOCs located in the area shall, except as otherwise provided under subsection (c), pay a fee to the State as a penalty for such failure, computed in accordance with subsection (b), for each calendar year beginning after the attainment date, until the area is redesignated as an attainment area for ozone. Each such plan revision should include procedures for assessment and collection of such fees.

“(b) Computation of Fee.—

“(1) Fee amount.—The fee shall equal \$5,000, adjusted in accordance with paragraph (3), per ton of VOC emitted by the source during the calendar year in excess of 80 percent of the baseline amount, computed under paragraph (2).

“(2) Baseline amount.—For purposes of this section, the baseline amount shall be computed, in accordance with such guidance as the Administrator may provide, as the lower of the amount of actual VOC emissions (‘actuals’) or VOC emissions allowed under the permit applicable to the source (or, if no such permit has been issued for the attainment year, the amount of VOC emissions allowed under the applicable implementation plan (‘allowables’)) during the attainment year. Notwithstanding the preceding sentence, the Administrator may issue guidance authorizing the baseline amount to be determined in accordance with the lower of average actuals or average allowables, determined over a period of more than one calendar year. Such guidance may provide that such average calculation for a specific source may be used if that source’s emissions are irregular, cyclical, or otherwise vary significantly from year to year.

“(3) Annual adjustment.—The fee amount under paragraph (1) shall be adjusted annually, beginning in the year beginning after the year of enactment, in accordance with section 402(b)(3)(B)(v) (relating to inflation adjustment).

“(c) Exception.—Notwithstanding any provision of this section, no source shall be required to pay any fee under subsection (a) with respect to emissions during any year that is treated as an Extension Year under section 181(a)(5).

“(d) Fee Collection by the Administrator.—If the Administrator has found that the fee provisions of the implementation plan do not meet the requirements of this section, or if the Administrator makes a finding that the State is not administering and enforcing the fee required under this section, the Administrator shall, in addition to any other action authorized under this title, collect, in accordance with procedures promulgated by the Administrator, the unpaid fees required under subsection (a). If the Administrator makes such a finding under section 179(a)(4), the Administrator may collect fees for periods before the determination, plus interest computed in accordance with section 6621(a)(2) of the Internal Revenue Code of 1986 (relating to computation of interest on underpayment of Federal taxes), to the extent the Administrator finds such fees have not been

paid to the State. The provisions of clauses (ii) through (iii) of section 402(b)(3)(C) (relating to penalties and use of the funds, respectively) shall apply with respect to fees collected under this subsection.

“(e) Exemptions for Certain Small Areas.—For areas with a total population under 200,000 which fail to attain the standard by the applicable attainment date, no sanction under this section or under any other provision of this Act shall apply if the area can demonstrate, consistent with guidance issued by the Administrator, that attainment in the area is prevented because of ozone or ozone precursors transported from other areas. The prohibition applies only in cases in which the area has met all requirements and implemented all measures applicable to the area under this Act.

“SEC. 185A. TRANSITIONAL AREAS.

“If an area has not violated the NAAQS for ozone for the 36-month period commencing on January 1, 1987, and ending on December 31, 1989, the Administrator shall suspend the requirements of this subpart until December 31, 1991. By June 30, 1992, the Administrator shall determine by order, based on the area's design value as of the attainment date, whether the area attained such standard by December 31, 1991. If the Administrator determines that the area attained the standard, the Administrator shall require, as part of the order, the State to submit a maintenance plan for the area within 12 months of such determination. If the Administrator determines that the area failed to attain the standard, the Administrator shall, by June 30, 1992, designate the area as nonattainment under section 107(d)(4).

“SEC. 185B. NO₅x AND VOC STUDY.

“The Administrator, in conjunction with the National Academy of Sciences, shall conduct a study on the role of ozone precursors in tropospheric ozone formation and control. The study should examine the roles of oxides of nitrogen and volatile organic compounds emission reductions, the role of biogenic volatile organic compounds emissions, and the basic information required for air quality models. The study should be completed and a report submitted to Congress within 2 years of the date of the enactment of the Clean Air Act Amendments of 1990.

SEC. 104. ADDITIONAL PROVISIONS FOR CARBON MONOXIDE NONATTAINMENT AREAS.

Part D of title I is amended by adding the following new subpart at the end:

“Subpart 3—Additional Provisions for Carbon Monoxide Nonattainment Areas

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 186. CLASSIFICATION AND ATTAINMENT DATES.

“(a) Classification by Operation of Law and Attainment Dates for Nonattainment Areas.—(1) Each area designated nonattainment for carbon monoxide pursuant to section 107(d) shall be classified at the time of such designation under Table 1, by operation of law, as a Moderate Area or a Serious Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the date of the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for carbon monoxide shall be as expeditiously as practicable but not later than the date provided in Table 1:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(2) At the time of publication of the notice required under section 107 (designating carbon monoxide nonattainment areas), the Administrator shall publish a notice announcing the classification of each such carbon monoxide nonattainment area.

The provisions of section 172(a)(1)(B) (relating to lack of notice-and-comment and judicial review) shall apply with respect to such classification.

“(3) If an area classified under paragraph (1), Table 1, would have been classified in another category if the design value in the area were 5 percent greater or 5 percent less than the level on which such classification was based, the Administrator may, in the Administrator's discretion, within 90 days after the date of the enactment of the Clean Air Act Amendments of 1990 by the procedure required under paragraph (2), adjust the classification of the area. In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for carbon monoxide in the area, the level of pollution transport between the area and the other affected areas, and the mix of sources and air pollutants in the area. The Administrator may make the same adjustment for purposes of paragraphs (2), (3), (6), and (7) of section 187(a).

“(4) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter in this subpart referred to as the ‘Extension Year’) the date specified in Table 1 of subsection (a) if—

“(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

“(B) no more than one exceedance of the national ambient air quality standard level for carbon monoxide has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

“(b) New Designations and Reclassifications.—

“(1) New designations to nonattainment.—Any area that is designated attainment or unclassifiable for carbon monoxide under section 107(d)(4), and that is subsequently redesignated to nonattainment for carbon monoxide under section 107(d)(3), shall, at the time of the redesignation, be classified by operation of law in accordance with Table 1 under subsections (a)(1) and (a)(4). Upon its classification, the area shall be subject to the same requirements under section 110, subpart 1 of this part, and this subpart that would have applied had the area been so classified at the time of the notice under subsection (a)(2), except that any absolute, fixed date applicable in connection with any such requirement is extended by operation of law by a period equal to the length of time between the date of the enactment of the Clean Air Act Amendments of 1990 and the date the area is classified.

“(2) Reclassification of moderate areas upon failure to attain.—

“(A) General rule.—Within 6 months following the applicable attainment date for a carbon monoxide nonattainment area, the Administrator shall determine, based on the area's design value as of the attainment date, whether the area has attained the standard by that date. Any Moderate Area that the Administrator finds has not attained the standard by that date shall be reclassified by operation of law in accordance with Table 1 of subsection (a)(1) as a Serious Area.

“(B) Publication of notice.—The Administrator shall publish a notice in the Federal Register, no later than 6 months following the attainment date, identifying each area that the Administrator has determined, under subparagraph (A), as having failed to attain and identifying the reclassification, if any, described under subparagraph (A).

“(c) References to Terms.—Any reference in this subpart to a ‘Moderate Area’ or a ‘Serious Area’ shall be considered a reference to a Moderate Area or a Serious Area, respectively, as classified under this section.

“SEC. 187. PLAN SUBMISSIONS AND REQUIREMENTS.

“(a) Moderate Areas.—Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area (or portion thereof, to the extent specified in guidance of the Administrator issued before the date of the enactment of the Clean Air Act Amendments of 1990), submit to the Administrator the State implementation plan revisions (including the plan items) described under this subsection, within such periods as are prescribed under this subsection, except to the extent the State has made such submissions as of such date of enactment:

“(1) Inventory.—No later than 2 years from the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 172(c) (3), in accordance with guidance provided by the Administrator.

“(2) Vehicle miles traveled.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, for areas with a design value above 12.7 ppm at the time of classification, the plan revision shall contain a forecast of vehicle miles traveled in the nonattainment area concerned for each year before the year in which the plan projects the national ambient air quality standard for carbon monoxide to be attained in the area. The forecast shall be based on guidance which shall be published by the Administrator within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990. The plan revision shall provide for annual updates of the forecasts to be submitted to the Administrator together with annual reports regarding the extent to which such forecasts proved to be accurate. Such annual reports shall contain estimates of actual vehicle miles traveled in each year for which a forecast was required.

“(3) Contingency provisions.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, for areas with a design value above 12.7 ppm at the time of classification, the plan revision shall provide for the implementation of specific measures to be undertaken if any estimate of vehicle miles traveled in the area which is submitted in an annual report under paragraph (2) exceeds the number predicted in the most recent prior forecast or if the area fails to attain the national primary ambient air quality standard for carbon monoxide by the primary standard attainment date. Such measures shall be included in the plan revision as contingency measures to take effect without further action by the State or the Administrator if the prior forecast has been exceeded by an updated forecast or if the national standard is not attained by such deadline.

“(4) Savings clause for vehicle inspection and maintenance provisions of the state implementation plan.—Immediately after the date of the enactment of the Clean Air Act Amendments of 1990, for any Moderate Area (or, within the Administrator's discretion, portion thereof), the plan for which is of the type described in section 182(a)(2)(B) any provisions necessary to ensure that the applicable implementation plan includes the vehicle inspection and maintenance program described in section 182(a)(2)(B).

“(5) Periodic inventory.—No later than September 30, 1995, and no later than the end of each 3 year period thereafter, until the area is redesignated to attainment, a revised inventory meeting the requirements of subsection (a)(1).

“(6) Enhanced vehicle inspection and maintenance.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 in the case of Moderate Areas with a design value greater than 12.7 ppm at the time of classification, a revision that includes provisions for an enhanced vehicle inspection and maintenance program as required in section 182(c) (3) (concerning serious ozone nonattainment areas), except that such program shall be for the purpose of reducing carbon monoxide rather than hydrocarbon emissions.

“(7) Attainment demonstration and specific annual emission reductions.—In the case of Moderate Areas with a design value greater than 12.7 ppm at the time of classification, no later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, a revision to provide, and a demonstration that the plan as revised will provide, for attainment of the carbon monoxide NAAQS by the applicable attainment date and provisions for such specific annual emission reductions as are necessary to attain the standard by that date.

The Administrator may, in the Administrator's discretion, require States to submit a schedule for submitting any of the revisions or other items required under this subsection. In the case of Moderate Areas with a design value of 12.7 ppm or lower at the time of classification, the requirements of this subsection shall apply in lieu of any requirement that the State submit a demonstration that the applicable implementation plan provides for attainment of the carbon monoxide standard by the applicable attainment date.

“(b) Serious Areas.—Each State in which all or part of a Serious Area is located shall, with respect to the Serious Area, make the submissions applicable under subsection (a) to Moderate Areas with a design value of 12.7 ppm or greater at the time of classification, and shall also submit the revision and other items described under this subsection. Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 the State shall submit a revision that includes the transportation control measures as required in section 182(d)(1) except that such revision shall be for the purpose of reducing CO emissions rather than volatile organic compound emissions. Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to require that gasoline sold, supplied, offered for sale or supply, dispensed, transported or introduced into commerce in the larger of—

“(1) the Consolidated Metropolitan Statistical Area (as defined by the United States Office of Management and Budget) (CMSA) in which the area is located, or

“(2) if the area is not located in a CMSA, the Metropolitan Statistical Area (as defined by the United States Office of Management and Budget) in which the area is located,

be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide (as determined by the Administrator), with fuels containing such level of oxygen as is necessary, in combination with other measures, to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of the national ambient air quality standard thereafter in the area. The revision shall provide that such requirement shall take effect no later than October 1, 1993, and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator. Notwithstanding the preceding provisions of this paragraph, the revision described in this paragraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of the national ambient air quality standard thereafter in the area.

“(c) Areas With Significant Stationary Source Emissions of CO.—

“(1) Serious areas.—In the case of Serious Areas in which stationary sources contribute significantly to carbon monoxide levels (as determined under rules issued by the Administrator), the State shall submit a plan revision within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, which provides that the term ‘major stationary source’ includes (in addition to the sources described in section 302) any stationary source which emits, or has the potential to emit, 50 tons per year or more of carbon monoxide.

“(2) Waivers for certain areas.—The Administrator may, on a case-by-case basis, waive any requirements that pertain to transportation controls, inspection and maintenance, or oxygenated fuels where the Administrator determines by rule that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in the area.

“(3) Guidelines.—Within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue guidelines for and rules determining whether stationary sources contribute significantly to carbon monoxide levels in an area.

“(d) CO Milestone.—

“(1) Milestone demonstration.—By March 31, 1996, each State in which all or part of a Serious Area is located shall submit to the Administrator a demonstration that the area has achieved a reduction in emissions of CO equivalent to the total of the specific annual emission reductions required by December 31, 1995. Such reductions shall be referred to in this subsection as the milestone.

“(2) Adequacy of demonstration.—A demonstration under this paragraph shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require. The Administrator shall determine whether or not a State's demonstration is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

“(3) Failure to meet emission reduction milestone.—If a State fails to submit a demonstration under paragraph (1) within the required period, or if the Administrator notifies the State that the State has not met the milestone, the State shall, within 9 months after such a failure or notification, submit a plan revision to implement an economic incentive and transportation control program as described in section 182(g)(4). Such revision shall be sufficient to achieve the specific annual reductions in carbon monoxide emissions set forth in the plan by the attainment date.

“(e) Multi-State CO Nonattainment Areas.—

“(1) Coordination among states.—Each State in which there is located a portion of a single nonattainment area for carbon monoxide which covers more than one State (‘multi-State nonattainment area’) shall take all reasonable steps to coordinate, substantively and procedurally, the revisions and implementation of State implementation plans applicable to the nonattainment area concerned. The Administrator may not approve any revision of a State implementation plan submitted under this part for a State in which part of a multi-State nonattainment area is located if the plan revision for that State fails to comply with the requirements of this subsection.

“(2) Failure to demonstrate attainment.—If any State in which there is located a portion of a multi-State nonattainment area fails to provide a demonstration of attainment of the national ambient air quality standard for carbon monoxide in that portion within the period required under this part the State may petition the Administrator to make a finding that the State would have been able to make such demonstration but for the failure of one or more other States in which other portions of the area are located to commit to the implementation of all measures required under section 187 (relating to plan submissions for carbon monoxide nonattainment areas). If the Administrator makes such finding, in the portion of the nonattainment area within the State submitting such petition, no sanction shall be imposed under section 179 or under any other provision of this Act, by reason of the failure to make such demonstration.

“(f) Reclassified Areas.—Each State containing a carbon monoxide nonattainment area reclassified under section 186(b)(2) shall meet the requirements of subsection (b) of this section, as may be applicable to the area as reclassified, according to the schedules prescribed in connection with such requirements, except that the Administrator may adjust any applicable deadlines (other than the attainment date) where such deadlines are shown to be infeasible.

“(g) Failure of Serious Area to Attain Standard.—If the Administrator determines under section 186(b)(2) that the national primary ambient air quality standard for carbon monoxide has not been attained in a Serious Area by the applicable attainment date, the State shall submit a plan revision for the area within 9 months after the date of such determination. The plan revision shall provide that a program of incentives and requirements as described in section 182(g)(4) shall be applicable in the area, and such program, in combination with other elements of the revised plan, shall be adequate to reduce the total tonnage of emissions of carbon monoxide in the area by at least 5 percent per year in each year after approval of the plan revision and before attainment of the national primary ambient air quality standard for carbon monoxide.”.

SEC. 105. ADDITIONAL PROVISIONS FOR PARTICULATE MATTER (PM-10) NONATTAINMENT AREAS.

(a) PM-10 Nonattainment Areas.—Part D of title I is amended by adding the following new subpart after subpart 3:

“Subpart 4—Additional Provisions for Particulate Matter Nonattainment Areas

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 188. CLASSIFICATIONS AND ATTAINMENT DATES.

“(a) Initial Classifications.—Every area designated nonattainment for PM-10 pursuant to section 107(d) shall be classified at the time of such designation, by operation of law, as a moderate PM-10 nonattainment area (also referred to in this subpart as a ‘Moderate Area’) at the time of such designation. At the time of publication of the notice under section 107(d)(4) (relating to area designations) for each PM-10 nonattainment area, the Administrator shall publish a notice announcing the classification of such area. The provisions of section 172(a)(1)(B) (relating to lack of notice-and-comment and judicial review) shall apply with respect to such classification.

“(b) Reclassification as Serious.—

“(1) Reclassification before attainment date.—The Administrator may reclassify as a Serious PM-10 nonattainment area (identified in this subpart also as a ‘Serious Area’) any area that the Administrator determines cannot practicably attain the national ambient air quality standard for PM-10 by the attainment date (as prescribed in subsection (c)) for Moderate Areas. The Administrator shall reclassify appropriate areas as Serious by the following dates:

“(A) For areas designated nonattainment for PM-10 under section 107(d)(4), the Administrator shall propose to reclassify appropriate areas by June 30, 1991, and take final action by December 31, 1991.

“(B) For areas subsequently designated nonattainment, the Administrator shall reclassify appropriate areas within 18 months after the required date for the State's submission of a SIP for the Moderate Area.

“(2) Reclassification upon failure to attain.—Within 6 months following the applicable attainment date for a PM-10 nonattainment area, the Administrator shall determine whether the area attained the standard by that date. If the Administrator finds that any Moderate Area is not in attainment after the applicable attainment date—

“(A) the area shall be reclassified by operation of law as a Serious Area; and

“(B) the Administrator shall publish a notice in the Federal Register no later than 6 months following the attainment date, identifying the area as having failed to attain and identifying the reclassification described under subparagraph (A).

“(c) Attainment Dates.—Except as provided under subsection (d), the attainment dates for PM-10 nonattainment areas shall be as follows:

“(1) Moderate areas.—For a Moderate Area, the attainment date shall be as expeditiously as practicable but no later than the end of the sixth calendar year after the area's designation as nonattainment, except that, for areas designated nonattainment for PM-10 under section 107(d)(4), the attainment date shall not extend beyond December 31, 1994.

“(2) Serious areas.—For a Serious Area, the attainment date shall be as expeditiously as practicable but no later than the end of the tenth calendar year beginning after the area's designation as nonattainment, except that, for areas designated nonattainment for PM-10 under section 107(d)(4), the date shall not extend beyond December 31, 2001.

“(d) Extension of Attainment Date for Moderate Areas.—Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the ‘Extension Year’) the date specified in paragraph (c)(1) if—

“(1) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

“(2) no more than one exceedance of the 24-hour national ambient air quality standard level for PM₁₀ has occurred in the area in the year preceding the Extension Year, and the annual mean concentration of PM₁₀ in the area for such year is less than or equal to the standard level.

No more than 2 one-year extensions may be issued under the subsection for a single nonattainment area.

“(e) Extension of Attainment Date for Serious Areas.—Upon application by any State, the Administrator may extend the attainment date for a Serious Area beyond the date specified under subsection (c), if attainment by the date established under subsection (c) would be impracticable, the State has complied with all requirements and commitments pertaining to that area in the implementation plan, and the State demonstrates to the satisfaction of the Administrator that the plan for that area includes the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any State, and can feasibly be implemented in the area. At the time of such application, the State must submit a revision to the implementation plan that includes a demonstration of attainment by the most expeditious alternative date practicable. In determining whether to grant an extension, and the appropriate length of time for any such extension, the Administrator may consider the nature and extent of nonattainment, the types and numbers of sources or other emitting activities in the area (including the influence of uncontrollable natural sources and transboundary emissions from foreign countries), the population exposed to concentrations in excess of the standard, the presence and concentration of potentially toxic substances in the mix of particulate emissions in the area, and the technological and economic feasibility of various control measures. The Administrator may not approve an extension until the State submits an attainment demonstration for the area. The Administrator may grant at most one such extension for an area, of no more than 5 years.

“(f) Waivers for Certain Areas.—The Administrator may, on a case-by-case basis, waive any requirement applicable to any Serious Area under this subpart where the Administrator determines that anthropogenic sources of PM₁₀ do not contribute significantly to the violation of the PM₁₀ standard in the area. The Administrator may also waive a specific date for attainment of the standard where the Administrator determines that nonanthropogenic sources of PM₁₀ contribute significantly to the violation of the PM₁₀ standard in the area.

“SEC. 189. PLAN PROVISIONS AND SCHEDULES FOR PLAN SUBMISSIONS.

“(a) Moderate Areas.—

“(1) Plan provisions.—Each State in which all or part of a Moderate Area is located shall submit, according to the applicable schedule under paragraph (2), an implementation plan that includes each of the following:

“(A) For the purpose of meeting the requirements of section 172(c)(5), a permit program providing that permits meeting the requirements of section 173 are required for the construction and operation of new and modified major stationary sources of PM₁₀.

“(B) Either (i) a demonstration (including air quality modeling) that the plan will provide for attainment by the applicable attainment date; or (ii) a demonstration that attainment by such date is impracticable.

“(C) Provisions to assure that reasonably available control measures for the control of PM-10 shall be implemented no later than December 10, 1993, or 4 years after designation in the case of an area classified as moderate after the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) Schedule for plan submissions.—A State shall submit the plan required under subparagraph (1) no later than the following:

“(A) Within 1 year of the date of the enactment of the Clean Air Act Amendments of 1990, for areas designated nonattainment under section 107(d)(4), except that the provision required under subparagraph (1)(A) shall be submitted no later than June 30, 1992.

“(B) 18 months after the designation as nonattainment, for those areas designated nonattainment after the designations prescribed under section 110(b)(4).

“(b) Serious Areas.—

“(1) Plan provisions.—In addition to the provisions submitted to meet the requirements of paragraph (a)(1) (relating to Moderate Areas), each State in which all or part of a Serious Area is located shall submit an implementation plan for such area that includes each of the following:

“(A) A demonstration (including air quality modeling)—

“(i) that the plan provides for attainment of the PM-10 national ambient air quality standard by the applicable attainment date, or

“(ii) for any area for which the State is seeking, pursuant to section 188(e), an extension of the attainment date beyond the date set forth in section 188(c), that attainment by that date would be impracticable, and that the plan provides for attainment by the most expeditious alternative date practicable.

“(B) Provisions to assure that the best available control measures for the control of PM-10 shall be implemented no later than 4 years after the date the area is classified (or reclassified) as a Serious Area.

“(2) Schedule for plan submissions.—A State shall submit the demonstration required for an area under paragraph (1)(A) no later than 4 years after reclassification of the area to Serious, except that for areas reclassified under section 188(b)(2), the State shall submit the attainment demonstration within 18 months after reclassification to Serious. A State shall submit the provisions described under paragraph (1)(B) no later than 18 months after reclassification of the area as a Serious Area.

“(3) Major sources.—For any Serious Area, the terms ‘major source’ and ‘major stationary source’ include any stationary source or group of stationary sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 70 tons per year of PM-10.

“(c) Milestones.—(1) Plan revisions demonstrating attainment submitted to the Administrator for approval under this subpart shall contain quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment and which demonstrate reasonable further progress, as defined in section 171(1), toward attainment by the applicable date.

“(2) Not later than 90 days after the date on which a milestone applicable to the area occurs, each State in which all or part of such area is located shall submit to the Administrator a demonstration that all measures in the plan approved under this section have been implemented and that the milestone has been met. A demonstration under this subsection shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require. The Administrator shall determine whether or not a State's demonstration under this subsection is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

“(3) If a State fails to submit a demonstration under paragraph (2) with respect to a milestone within the required period or if the Administrator determines that the area has not met any applicable milestone, the Administrator shall require the State, within 9 months after such failure or determination to submit a plan revision that assures that the State will achieve the next milestone (or attain the national ambient air quality standard for PM-10, if there is no next milestone) by the applicable date.

“(d) Failure To Attain.—In the case of a Serious PM-10 nonattainment area in which the PM-10 standard is not attained by the applicable attainment date, the State in which such area is located shall, after notice and opportunity for public comment, submit within 12 months after the applicable attainment date, plan revisions which provide for attainment of the PM-10 air quality standard and, from the date of such submission until attainment, for an annual reduction in PM-10 or PM-10 precursor emissions within the area of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared for such area.

“(e) PM-10 Precursors.—The control requirements applicable under plans in effect under this part for major stationary sources of PM-10 shall also apply to major stationary sources of PM-10 precursors, except where the Administrator determines that such sources do not contribute significantly to PM-10 levels which exceed the standard in the area. The Administrator shall issue guidelines regarding the application of the preceding sentence.

“SEC. 190. ISSUANCE OF RACM AND BACM GUIDANCE.

“The Administrator shall issue, in the same manner and according to the same procedure as guidance is issued under section 108(c), technical guidance on reasonably available control measures and best available control measures for urban fugitive dust, and emissions from residential wood combustion (including curtailments and exemptions from such curtailments) and prescribed silvicultural and agricultural burning, no later than 18 months following the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall also examine other categories of sources contributing to nonattainment of the PM-10 standard, and determine whether additional guidance on reasonably available control measures and best available control measures is needed, and issue any such guidance no later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990.”.

(b) PM-10 Increments in PSD Areas.—Section 166 (42 U.S.C. 7476) is amended by adding the following new subsection at the end:

“(f) PM-10 Increments.—The Administrator is authorized to substitute, for the maximum allowable increases in particulate matter specified in section 163(b) and section 165(d)(2)(C)(iv), maximum allowable increases in particulate matter with an aerodynamic diameter smaller than or equal to 10 micrometers. Such substituted maximum allowable increases shall be of equal stringency in effect as those specified in the provisions for which they are substituted. Until the Administrator promulgates regulations under the authority of this subsection, the current maximum allowable increases in concentrations of particulate matter shall remain in effect.”.

SEC. 106. ADDITIONAL PROVISIONS FOR AREAS DESIGNATED NONATTAINMENT FOR SULFUR OXIDES, NITROGEN DIOXIDE, AND LEAD.

Part D of title I is amended by adding a new subpart after subpart 4 as follows:

“Subpart 5—Additional Provisions for Areas Designated Nonattainment for Sulfur Oxides, Nitrogen Dioxide, or Lead

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 191. PLAN SUBMISSION DEADLINES.

“(a) Submission.—Any State containing an area designated or redesignated under section 107(d) as nonattainment with respect to the national primary ambient air quality standards for sulfur oxides, nitrogen dioxide, or lead subsequent to the date of the enactment of the Clean Air Act Amendments of 1990 shall submit to the Administrator, within 18 months of the designation, an applicable implementation plan meeting the requirements of this part.

“(b) States Lacking Fully Approved State Implementation Plans.—Any State containing an area designated nonattainment with respect to national primary ambient air quality standards for sulfur oxides or nitrogen dioxide under section 107(d)(1)(C)(i), but lacking a fully approved implementation plan complying with the requirements of this Act (including part D) as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, shall submit to the Administrator, within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990, an implementation plan meeting the requirements of subpart 1 (except as otherwise prescribed by section 192).

“SEC. 192. ATTAINMENT DATES.

“(a) Plans Under Section 191(a).—Implementation plans required under section 191(a) shall provide for attainment of the relevant primary standard as expeditiously as practicable but no later than 5 years from the date of the nonattainment designation.

“(b) Plans Under Section 191(b).—Implementation plans required under section 191(b) shall provide for attainment of the relevant primary national ambient air quality standard within 5 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(c) Inadequate Plans.—Implementation plans for nonattainment areas for sulfur oxides or nitrogen dioxide with plans that were approved by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990 but, subsequent to such approval, were found by the Administrator to be substantially inadequate, shall provide for attainment of the relevant primary standard within 5 years from the date of such finding.”.

SEC. 107. PROVISIONS RELATED TO INDIAN TRIBES.

(a) Definition of Air Pollution Control Agency.—Section 302(b) (42 U.S.C. 7602(b)) is amended by—

(1) deleting “or” at the end of paragraph (3);

(2) striking the semicolons at the end of paragraphs (1), (2), and (3) and inserting periods at the end of each such paragraph; and

(3) adding the following new paragraph after paragraph (4):

“(5) An agency of an Indian tribe.”.

(b) Definition of Indian Tribe.—Section 302 (42 U.S.C. 7602) is amended by adding new subsection (r) to read as follows:

“(r) Indian Tribe.—The term ‘Indian tribe’ means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village, which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.”.

(c) SIPS.—Section 110 (42 U.S.C. 7410) is amended by adding the following new subsection after subsection (n):

“(o) Indian Tribes.—If an Indian tribe submits an implementation plan to the Administrator pursuant to section 301(d), the plan shall be reviewed in accordance with the provisions for review set forth in this section for State plans, except as otherwise provided by regulation promulgated pursuant to section 301(d)(2). When such plan becomes effective in accordance with the regulations promulgated under section 301(d), the plan shall become applicable to all areas (except as expressly provided otherwise in the plan) located within the exterior boundaries of the reservation, notwithstanding the issuance of any patent and including rights-of-way running through the reservation.”.

(d) Tribal Authority.—Section 301 (42 U.S.C. 7601) is amended by adding at the end thereof the following new subsection:

“(d) Tribal Authority.—(1) Subject to the provisions of paragraph (2), the Administrator—

“(A) is authorized to treat Indian tribes as States under this Act, except for purposes of the requirement that makes available for application by each State no less than one-half of 1 percent of annual appropriations under section 105; and

“(B) may provide any such Indian tribe grant and contract assistance to carry out functions provided by this Act.

“(2) The Administrator shall promulgate regulations within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, specifying those provisions of this Act for which it is appropriate to treat Indian tribes as States. Such treatment shall be authorized only if—

“(A) the Indian tribe has a governing body carrying out substantial governmental duties and powers;

“(B) the functions to be exercised by the Indian tribe pertain to the management and protection of air resources within the exterior boundaries of the reservation or other areas within the tribe's jurisdiction; and

“(C) the Indian tribe is reasonably expected to be capable, in the judgment of the Administrator, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this Act and all applicable regulations.

“(3) The Administrator may promulgate regulations which establish the elements of tribal implementation plans and procedures for approval or disapproval of tribal implementation plans and portions thereof.

“(4) In any case in which the Administrator determines that the treatment of Indian tribes as identical to States is inappropriate or administratively infeasible, the Administrator may provide, by regulation, other means by which the Administrator will directly administer such provisions so as to achieve the appropriate purpose.

“(5) Until such time as the Administrator promulgates regulations pursuant to this subsection, the Administrator may continue to provide financial assistance to eligible Indian tribes under section 105.”.

SEC. 108. MISCELLANEOUS PROVISIONS.

(a) Transportation Planning Guidance.—(1) Section 108(e) (42 U.S.C. 7408(e)) is amended by revising the first sentence to read as follows: “Within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990 and periodically thereafter as necessary to maintain a continuous process of transportation and air quality planning, including emissions inventory development, the Administrator shall, after consultation with the Secretary of Transportation and State and local officials, update the June 1978 Transportation-Air Quality Planning Guidelines.”.

(2) So much of subsection (f)(1) of section 108 (42 U.S.C. 7408) as precedes subparagraph (B) is amended to read as follows:

“(f) Information To Be Available.—(1) Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish and make available to appropriate Federal, State, and local environmental and transportation agencies, and from time to time thereafter the Administrator shall revise—

“(A) information, prepared as appropriate after consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, regarding the emission reduction potential of transportation control measures, including—

“(i) trip-reduction ordinances;

“(ii) employer-based transportation management plans;

“(iii) transit improvements;

“(iv) traffic-flow improvements;

“(v) areawide rideshare programs;

“(vi) park-and-ride and fringe parking programs;

“(vii) work-schedule changes;

“(viii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;

“(ix) programs to control extended idling of vehicles;

“(x) vanpool purchase incentives;

“(xi) incentives for employer-based transportation management plans;

“(xii) programs to limit portions of road surfaces to the use of nonmotorized vehicles or pedestrian use, both as to time and place;

“(xiii) programs for secure bicycle storage facilities and other facilities, including bicycle lanes;

“(xiv) programs for new construction and major reconstruction of paths or tracks solely for use by pedestrian or other nonmotorized means of transportation; and

“(xv) telecommuting.

In considering such measures for inclusion in any State implementation plan or revision thereto as may be required under this Act, the State shall choose from among and implement such measures as necessary, and should ensure adequate access to downtown, other commercial, and residential areas and avoid measures that increase or relocate emissions and congestion rather than reduce them.”.

(b) RACT/BACT/LAER Clearinghouse.—Section 108 (42 U.S.C. 7408) is amended by adding the following at the end thereof:

“(h) RACT/BACT/LAER Clearinghouse.—The Administrator shall make information regarding emission control technology available to the States and to the general public through a central database. Such information shall include all control technology information received pursuant to State plan provisions requiring permits for sources, including operating permits for existing sources.”.

(c) State Reports on Emissions-Related Data.—Section 110 (42 U.S.C. 7410) is amended by adding the following new subsection after subsection (o):

“(p) Reports.—Any State shall submit, according to such schedule as the Administrator may prescribe, such reports as the Administrator may require relating to emission reductions, vehicle miles traveled, congestion levels, and any other information the Administrator may deem necessary to assess the development effectiveness, need for revision, or implementation of any plan or plan revision required under this Act.”.

(d) New Source Standards of Performance.—(1) Section 111(b)(1)(B) (42 U.S.C. 7411(b)(1)(B)) is amended as follows:

(A) Strike “120 days” and insert “one year”.

(B) Strike “90 days” and insert “one year”.

(C) Strike “four years” and insert “8 years”.

(D) Immediately before the sentence beginning “Standards of performance or revisions thereof” insert “Notwithstanding the requirements of the previous sentence, the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard.”.

(E) Add the following at the end: “When implementation and enforcement of any requirement of this Act indicate that emission limitations and percent reductions beyond those required by the standards promulgated under this section are achieved in practice, the Administrator shall, when revising standards promulgated under this section, consider the emission limitations and percent reductions achieved in practice.”.

(2) Section 111(f)(1) (42 U.S.C. 7411(f)(1)) is amended to read as follows:

“(1) For those categories of major stationary sources that the Administrator listed under subsection (b)(1)(A) before the date of the enactment of the Clean Air Act Amendments of 1990 and for which regulations had not been proposed by the Administrator by such date, the Administrator shall:

“(A) propose regulations establishing standards of performance for at least 25 percent of such categories of sources within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990;

“(B) propose regulations establishing standards of performance for at least 50 percent of such categories of sources within 4 years after the date of the enactment of the Clean Air Act Amendments of 1990; and

“(C) propose regulations for the remaining categories of sources within 6 years after the date of the enactment of the Clean Air Act Amendments of 1990.”.

(e) Savings Clause.—Section 111(a)(3) (42 U.S.C. 7411(f)(1)) is amended by adding at the end: “Nothing in title II of this Act relating to nonroad engines shall be construed to apply to stationary internal combustion engines.”.

(f) Regulation of Existing Sources.—Section 111(d)(1)(A)(i) (42 U.S.C. 7411(d)(1)(A)(i)) is amended by striking “or 112(b)(1)(A)” and inserting “or emitted from a source category which is regulated under section 112”.

(g) Consultation.—The penultimate sentence of section 121 (42 U.S.C. 7421) is amended to read as follows: “The Administrator shall update as necessary the original regulations required and promulgated under this section (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to ensure adequate consultation.”.

(h) Delegation.—The second sentence of section 301(a)(1) (42 U.S.C. 7601(a)(1)) is amended by inserting “subject to section 307(d)” immediately following “regulations”.

(i) Definitions.—Section 302 (42 U.S.C. 7602) is amended as follows:

(1) Insert the following new subsections after subsection (r):

“(s) VOC.—The term ‘VOC’ means volatile organic compound, as defined by the Administrator.

“(t) PM-10.—The term ‘PM-10’ means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers, as measured by such method as the Administrator may determine.

“(u) NAAQS and CTG.—The term ‘NAAQS’ means national ambient air quality standard. The term ‘CTG’ means a Control Technique Guideline published by the Administrator under section 108.

“(v) NOx.—The term ‘NOx’ means oxides of nitrogen.

“(w) CO.—The term ‘CO’ means carbon monoxide.

“(x) Small Source.—The term ‘small source’ means a source that emits less than 100 tons of regulated pollutants per year, or any class of persons that the Administrator determines, through regulation, generally lack technical ability or knowledge regarding control of air pollution.

“(y) Federal Implementation Plan.—The term ‘Federal implementation plan’ means a plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan, and which includes enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as fees, marketable permits, or auctions of emissions allowances), and provides for attainment of the relevant national ambient air quality standard.”.

(2) Section 302(g) (42 U.S.C. 7602(g)) is amended by adding the following at the end: “Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term ‘air pollutant’ is used.”.

(j) Pollution Prevention.—Section 101 (42 U.S.C. 7401) is amended as follows:

(1) Amend subsection (a)(3) to read as follows:

“(3) that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments; and”.

(2) Amend subsection (b)(4) by inserting “prevention and” immediately after “pollution”.

(3) Add a new subsection (c) to read as follows:

“(c) Pollution Prevention.—A primary goal of this Act is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this Act, for pollution prevention.”.

(k) Title I is amended by adding the following after section 192:

“SEC. 193. GENERAL SAVINGS CLAUSE.

“Each regulation, standard, rule, notice, order and guidance promulgated or issued by the Administrator under this Act, as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect according to its terms, except to the extent otherwise provided under this Act, inconsistent with any provision of this Act, or revised by the Administrator. No control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before the date of the enactment of the Clean Air Act Amendments of 1990 in any area which is a nonattainment area for any air pollutant may be modified after such enactment in any manner unless the modification insures equivalent or greater emission reductions of such air pollutant.”.

(l) Boundary Changes.—Section 162(a) (42 U.S.C. 7472(a)) is amended by adding at the end thereof the following: “The extent of the areas designated as Class I under this section shall conform to any changes in the boundaries of such areas which have occurred subsequent to the date of the enactment of the Clean Air Act Amendments of 1977, or which may occur subsequent to the date of the enactment of the Clean Air Act Amendments of 1990.”.

(m) Boundaries.—Section 164(a) (42 U.S.C. 7474(a)) is amended by inserting immediately before the sentence beginning “Any area (other than an area referred to in paragraph (1) or (2))” the following: “The extent of the areas referred to in paragraph (1) and (2) shall conform to any changes in the boundaries of such areas which have occurred subsequent to the date of the enactment of the Clean Air Act Amendments of 1977, or which may occur subsequent to the date of the enactment of the Clean Air Act Amendments of 1990.”.

(n) Assessments.—Section 108 (42 U.S.C. 7408) is amended by adding at the end thereof a new subsection (g) to read as follows:

“(g) Assessment of Risks to Ecosystems.—The Administrator may assess the risks to ecosystems from exposure to criteria air pollutants (as identified by the Administrator in the Administrator's sole discretion).”.

(o) Review of Reports and Public Participation.—Section 307 (42 U.S.C. 7607) is amended by adding the following after subsection (g):

“(h) Reports.—No report required by this Act to be submitted to Congress shall be subject to judicial review.

“(i) Public Participation.—It is the intent of Congress that, consistent with the policy of the Administrative Procedures Act, the Administrator in promulgating any regulation under this Act, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in section 107(d), 172(a), 181(a) and (b), and 186(a) and (b).”.

(p) Ethics, Financial Disclosure, and Conflicts of Interest.—Section 318 (42 U.S.C. 7618) is repealed.

(q) Information Promoting Compliance by Small Sources.—The following new section is added after section 128:

“SEC. 129. INFORMATION FOR SMALL SOURCES.

“(a) In General.—The Administrator shall develop, collect, evaluate, and coordinate information on compliance methods and technologies for small sources. The Administrator shall maintain a central reference library of such information, and shall disseminate such information to States or other persons seeking to comply with this Act.

“(b) Education Programs for Small Sources.—The Administrator shall, in cooperation with the States and their small source technical assistance programs created pursuant to section 110(a)(2)(N), develop programs for educating small sources about their obligations under this Act and means to comply.”.

SEC. 109. INTERSTATE POLLUTION.

(a) Amendments to Section 126.—Section 126 (42 U.S.C. 7426) is amended as follows:

(1) In subsection (b)—

(A) in the first sentence, following “major source”, insert “or group of stationary sources”; and

(B) strike “110(a)(2)(E)(i)” and insert in lieu thereof “110(a)(2)(D)(ii) or this section”.

(2) In subsection (c)—

(A) in the first sentence, following the words “violation of”, insert “this section and”; and

(B) strike “110(a)(2)(E)(i)” wherever it appears and insert in lieu thereof “110(a)(2)(D)(ii) or this section”.

(b) Amendment to Section 302.—Section 302(h) (42 U.S.C. 7602(h)) is amended by inserting before the period “, whether caused by transformation, conversion, or combination with other air pollutants”.

SEC. 110. CONFORMING AMENDMENTS.

The Clean Air Act is amended as follows—

(1) Strike, in section 161 (42 U.S.C. 7471), “identified pursuant to section 107(d)(1)(D) or (E)” and insert “designated pursuant to section 107 as attainment or unclassifiable”.

(2) Strike, in section 162(b) (42 U.S.C. 7472(b)), “identified pursuant to section 107(d)(1)(D) or (E)” and insert “designated pursuant to section 107(d) as attainment or unclassifiable”;

(3) Strike, in section 167 (42 U.S.C. 7477), the reference to “included in the list promulgated pursuant to paragraph (1) (D) or (E) of subsection (d) of section 107 of this Act” and insert “designated pursuant to section 107(d) as attainment or unclassifiable”.

(4) Strike subsections (a) and (b) of section 176 (42 U.S.C. 7506).

(5) Amend section 307(d)(1) (42 U.S.C. 7607(d)(1)) as follows:

(A) Subparagraph (C) is amended to read as follows:

“(C) the promulgation or revision of any standard of performance under section 111, or emission standard or limitation under section 112(d), any standard under section 112(f), or any regulation under section 112(g)(1)(D) and (F), or any regulation under section 112(m) or (n),”.

(B) Subparagraph (F) is amended to read as follows:

“(F) the promulgation or revision of any regulation under title V (relating to control of acid deposition),”.

(C) Delete “and” at the end of subparagraph (M), redesignate subparagraph (N) as subparagraph (U), and add the following new subparagraphs after subparagraph (M):

“(N) the promulgation or revision of any regulation pertaining to consumer and commercial products under section 183(e),

“(O) the promulgation or revision of any regulation pertaining to field citations under section 113(d)(3),

“(P) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under section 212,

“(Q) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under section 213,

“(R) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under section 217,

“(S) the promulgation or revision of any regulation pertaining to market-based alternative controls under section 214, the promulgation or revision of any regulation under title IV,

“(T) the promulgation or revision of any regulation under section 183(f) pertaining to marine vessels, and”.

TITLE II—PROVISIONS RELATING TO MOBILE SOURCES

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 201. CLEAN FUEL REQUIREMENTS.

(a) Definitions.—Section 216 (42 U.S.C. 7550) is amended by adding the following at the end:

“(7) Urban bus.—The term ‘urban bus’ has the meaning provided under regulations of the Administrator promulgated under section 202(a).

“(8) Clean alternative fuel.—The term ‘clean alternative fuel’ means any fuel (including methanol, ethanol, or other alcohols (including any mixture thereof containing 85 percent or more by volume of such alcohol with gasoline or other fuels), reformulated gasoline, diesel, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity) used in a clean-fuel vehicle (or clean-fuel fleet vehicle) that complies with the standards and requirements applicable to such vehicle under this title when using such fuel or power source.

“(9) Clean-fuel vehicle and clean-fuel fleet vehicle.—The term ‘clean-fuel vehicle’ means any motor vehicle that, when operated on clean alternative fuel, complies with the requirements of section 212(b). The term ‘clean-fuel fleet vehicle’ has the meaning provided in subsection (f).

“(10) Emissions of ozone-forming volatile organic compounds.—The term ‘emissions of ozone-forming volatile organic compounds’ means motor vehicle exhaust and evaporative, refueling, and running loss emissions of oxygenated and nonoxygenated hydrocarbons, excluding methane, and, after such exclusion, adjusted for reactivity.

“(11) Covered fleet.—The term ‘covered fleet’ means 10 or more motor vehicles which are owned or operated by a single person. In determining the number of vehicles owned by a single person for purposes of this paragraph, all motor vehicles owned by such person, by any person which controls such person, by any person controlled by such person, and by any person under common control with such person shall be treated as owned by such person. The term ‘covered fleet’ shall not include motor vehicles held for lease or rental to the general public, motor vehicles held for sale by motor vehicle dealers (including demonstration vehicles), motor vehicles used for motor vehicle manufacturer product evaluations or tests, law enforcement and other emergency vehicles, or nonroad vehicles.

“(12) Covered fleet vehicles.—The term ‘covered fleet vehicles’ includes only motor vehicles in a covered fleet which are centrally fueled (or capable of being centrally fueled, as determined by rule by the Administrator) and centrally maintained (or capable of being centrally maintained), in accordance with usual practices and daily operations, primarily at a facility located in the nonattainment area and provided by, and under the direct control of, the owner or operator of the covered fleet.”.

(b) Clean Fuel Requirements.—Section 212 (42 U.S.C. 7546) is amended to read as follows:

“SEC. 212. CLEAN FUEL REQUIREMENTS.

“(a) Urban Buses.—

“(1) In general.—Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations under this subsection applicable to new urban buses operated primarily in a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area (as defined by the United States Office of Management and Budget) with a 1980 population of 750,000 or more. The Administrator shall also promulgate comparable regulations for existing urban buses operated primarily in such areas which, after January 1, 1995, have their engines replaced or rebuilt, taking into consideration costs, energy, safety, and other relevant factors, including lead time.

“(2) Requirement.—The regulations under this subsection shall provide that all new urban buses purchased or placed into service and operated by owners or operators of urban buses in the areas referred to in paragraph (1) shall be clean-fuel vehicles capable of operating, and shall be exclusively operated, on clean alternative fuel.

“(3) Effective date and phase-in.—The Administrator shall prescribe a schedule phasing in the applicability of the requirements established by this subsection for new urban buses over the 1992 through 1995 model years as follows: the requirements shall apply to 10 percent of new urban buses purchased or placed into service in model year 1992; the requirements shall apply to 25 percent of new urban buses purchased or placed into service in model year 1993; the requirements shall apply to 60 percent of new urban buses purchased or placed into service in model year 1994; and the requirements shall apply to 100 percent of such buses in model year 1995 and thereafter. At least 30 percent of the total purchases of new urban buses for all areas in each model year after January 1, 1995, shall be clean fuel vehicles that exclusively use either natural gas, ethanol, or methanol or another clean alternative fuel with comparable emissions, as determined by the Administrator. The Administrator shall prescribe emission standards for pollutants other than particulates under section 202 for urban buses to be considered clean fuel vehicles in model year 1992 and before application of standards under subsection (b). Such standards shall be comparable to the standard for particulates under this subsection.

“(4) Application.—Application of one or more of the requirements prescribed under this subsection may be delayed by up to 2 years if the Administrator determines that such a delay will substantially advance the technology, improve the benefits, or lower the costs of the urban bus program established by this subsection.

“(5) Particulate matter.—The regulations under section 202(a)(1) applicable to emissions of particulate matter from 1991 through 1993 model year urban buses capable of operating on diesel fuel shall contain a standard which provides that emissions of particulate matter from such buses may not exceed 0.25 grams per brake horsepower-hour. Emissions of particulate matter from urban buses purchased or placed into service after model year 1993 that use clean alternative fuels shall not exceed 0.10 grams per brake horsepower-hour. The emission standard shall be prescribed by regulation within 180 days after the date of the enactment of the Clean Air Act Amendments of 1990.

“(b) Standards for Clean-Fuel Vehicles.—

“(1) In general.—A motor vehicle that, when operated on a clean alternative fuel, is certified to meet the applicable emissions standards under section 202 for carbon monoxide, oxides of nitrogen, and particulate matter, and is certified to meet the emission standards specified in paragraph (2), (3), or (4), as applicable, shall be considered a clean fuel vehicle within the meaning of section 216 and this section.

“(2) Standards for passenger cars and light-duty trucks up to 3,750 lbs. (lvw).—Within 26 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards under this paragraph applicable to all passenger cars and all light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of up to 3,750 lbs. that are to be considered clean-fuel vehicles.

“(A) Ozone-forming vocs.—The standards contained in the regulations under this paragraph shall require that total vehicle emissions of ozone-forming volatile organic compounds not exceed the level set forth in table 1 for such vehicles manufactured in the applicable model year:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(B) Other substances.—

“(i) Phase 1.—The regulations under this paragraph shall require that, for vehicles manufactured in the model year 1995 and thereafter, total vehicle emissions of benzene, 1,3-butadiene, gasoline vapors, polycyclic organic material (POM), including POM in diesel particulates, and formaldehyde shall not exceed the level that, in the Administrator's judgment, may be reasonably expected to achieve a 12 percent reduction from the baseline in the annual incidence of human cancer attributable to such emissions. The baseline for determining the 12 percent reduction shall be the annual incidence of human cancer attributable to emissions of such air pollutants from such conventional gasoline-fueled vehicles certified to meet the standards under section 202 for model year 1994. For purposes of determining the level of such emissions from conventional gasoline-fueled vehicles for such model year 1994 standards, emissions shall be measured from vehicles using 1990 certification gasoline (indoline) with a Reid Vapor Pressure of 9.0 psi which was determined by the Administrator in September 1989 in a Special Report entitled ‘Analysis of the Economic Effects of Methanol as an Automotive Fuel’ to produce ozone forming volatile organic compound emissions of 0.95 gpm.

“(ii) Phase 2.—The Administrator shall revise the regulations under this paragraph applicable to any model year after the model year 1999 to substitute a 24 percent reduction for the 12 percent reduction referred to in clause (i), except that if the Administrator determines on petition or on the Administrator's own motion, that (for any model year after model year 1999) it is not technically feasible to reduce emissions of such air pollutants, taking into consideration the availability and cost of the technology, and noise, energy, and safety factors, by 24 percent, the Administrator shall revise the regulations under this paragraph to limit such emission to a level that may reasonably be anticipated to achieve reduction of not less than 18

percent in the annual incidence of human cancer attributable to such emissions and include the basis for that determination in such regulations. The Administrator shall act on any such petition within 9 months after it is received.

“(3) Light-duty trucks.—The Administrator shall, by rule, establish standards and emission reduction levels under this subsection for light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of 3,750 lbs. or more but less than or equal to 5,750 lbs. (lvw) manufactured during the model year 2000 and thereafter.

“(4) Heavy-duty trucks.—Effective for model years 2000 or later, the Administrator may at any time, by rule, establish standards and emission reduction levels under this subsection for motor vehicles with a gross vehicle weight rating (gvwr) of 8,500 lbs. or more. The standards and emission reduction referred to in this paragraph and paragraph (3) shall contain emission standards and reductions comparable in stringency to those under paragraph (2), taking into account the weight class and operating conditions and uses for which such vehicles are designed and the Administrator shall take into consideration the availability and cost of applicable technology and noise, energy, and safety factors. The standard established under this paragraph shall not apply with respect to emissions of particulate matter from urban buses. Such standards and reductions shall not take effect before the end of the fourth full model year after promulgation.

“(5) Compliance.—In determining compliance by vehicles and engines in actual use with the emission standards and reductions prescribed under this subsection by testing in-use vehicles on certification-type fuels, only vehicles that have been detectably abused, tampered with, or not maintained in a manner that would likely affect emissions performance may be excluded from the sample tested pursuant to section 207(c). When a vehicle that operates on 2 kinds of fuel is certified or tested, it shall be certified or tested on one fuel only after all traces of the other fuel that can practically be removed from the vehicle's fuel system have been removed. The Administrator may require a manufacturer to remedy nonconforming engines or vehicles pursuant to section 207(c) either (A) when a substantial number of vehicles fails to comply with the applicable emissions standards and reductions prescribed under this subsection or (B) when the average emissions performance of a representative sample does not satisfy the applicable emission standards and reductions prescribed under this subsection. Recall procedures established under this paragraph apply only to standards and reductions promulgated pursuant to this section. Any manufacturer shall be treated as complying with the requirements of this subsection if the manufacturer specifies the use of the reformulated gasoline specified by the Administrator under subsection (c)(5) and if the vehicles produced by such manufacturer for sale in the covered areas comply with the standards and requirements established under section 202 (and related provisions of this title) that are generally applicable to such vehicles in the model year in which they are produced. For purposes of this subsection, the emission level of ozone-forming volatile organic compounds shall be determined by the Administrator by testing, in accordance with the requirements and procedures of section 206, a representative sample of vehicles with no more than 62,000 miles of proper in-use operation in customer hands, as provided in the report referred to in subsection (b)(2)(B)(i). Compliance shall be determined based on the mean level of the applicable emissions from such representative sample.

“(6) EPA authority.—Nothing in this section shall be construed to give the Administrator authority to mandate the production or sale of clean-fuel vehicles or to specify as applicable, the models, lines, or types of, or marketing or price practices, policies, or strategies for, vehicles subject to this section. Nothing in this section shall be construed to give the Administrator authority to mandate marketing or pricing practices, policies, or strategies for fuels.

“(7) Credits.—The Administrator shall, by rule, promulgate regulations for granting a manufacturer an appropriate amount of credits toward compliance with the requirements of this subsection for clean-fuel vehicles that achieve emission reductions greater than those required of such vehicles under this subsection and for clean fuel vehicles in classes or categories not required under this subsection. A manufacturer granted credits may use such credits or transfer some or all of the credits for use by one or more other manufacturers in the same area included in the fleet program by subsection (f) in demonstrating compliance with such requirements. Such credits may be used to treat vehicles which do not meet the requirements of this subsection as complying with the requirements of this subsection. Credits may not be used to permit the manufacture or sale of any vehicle which does not comply with standards set forth in section 202. The Administrator may make the credits available

for use after consideration of enforceability, environmental and economic factors and upon such terms and conditions as the Administrator finds appropriate.

“(c) Availability of Clean Fuels.—

“(1) In general.—Clean alternative fuels shall be made available by fuel providers as specified by the Administrator in any area in which clean-fuel vehicles or clean-fuel fleet vehicles are required to be made available under this section.

“(2) Availability.—The Administrator shall determine the clean alternative fuels to be made available, and the amounts thereof necessary, to allow operation of vehicles so that they comply with the applicable emissions standards, based on motor vehicle manufacturers' projections of future sales of clean-fuel vehicles, and clean-fuel fleet vehicles consultations with the affected fleet operators and State and local governments and on a determination of cost effectiveness, taking into consideration technological feasibility, health, environment, and safety, net air quality improvement, fuel availability, consumer acceptance, capability of production of vehicles and fuels, and other relevant factors, including an evaluation of the differing characteristics of commercial, government, and passenger fleets and the capability of centrally fueled and maintained fleets to utilize clean fuels.

“(3) Minimum availability requirements.—At a minimum one clean alternative fuel shall be offered for retail sale at retail gasoline dispensing facility dispensing at least 50,000 gallons of motor vehicle fuel per month, on average, in the areas in which such vehicles are required to be made available. The Governor of any State in which the requirements of this subsection apply may modify such requirements exempting some such facilities for a period not longer than 5 years after such requirements first apply, provided that information available to the Governor indicates that such fuels will be otherwise readily available throughout the area. If a retail gasoline dispensing facility would have to remove or replace one or more motor vehicle fuel underground storage tanks and accompanying piping in order to comply with the provisions of this section, and it had removed and replaced such tank or tanks and accompanying piping prior to the date of the enactment of the Clean Air Act Amendments of 1990, it shall not be required to comply with this subsection until a period of 7 years has passed from the date of the removal and replacement of such tank or tanks.

“(4) Credits.—The Administrator shall, by rule, promulgate regulations for granting persons subject to the requirements prescribed under this subsection appropriate credits for making greater quantities of clean alternative fuels available than required under this subsection or for making available fuel which result in greater emission reductions than required under this subsection, and any person granted credits may transfer some or all of the credits for use by one or more persons in the same area included in the fleet program under subsection (f) in demonstrating compliance with such requirements. The Administrator may make the credits available for use after consideration of enforceability, safety, environmental, and economic factors and upon such terms and conditions as the Administrator finds appropriate.

“(5) Performance of clean fuel.—The Administrator shall by regulation establish specifications for any clean alternative fuel required to be made available under this subsection as the Administrator finds necessary to reduce or eliminate an unreasonable risk to public health, welfare, or safety associated with its use or to ensure acceptable vehicle maintenance and performance characteristics. In determining the specifications for each fuel or fuels to be made available, the Administrator shall select the specifications resulting in the maximum level of emissions reductions that can be achieved to the extent that it is needed to meet the standards for the applicable model years, provided that such specifications will result in the establishment of a cost effective combination of fuel or fuels and motor vehicle technology. Such specifications shall include at least one specification for a reformulated gasoline that can be utilized in gasoline-fueled vehicles satisfying the emissions standards prescribed under section 202 for the applicable model years to satisfy the requirements of subsection (b).

“(6) Enforcement.—A fuel provider who fails to make such fuel available as required by this section and in the regulations under this subsection shall be liable for a civil penalty under the first sentence of section 205.

“(d) Clean Fuel Vehicle Program.—

“(1) In general.—For purposes of subsections (b) and (c), all new passenger cars and all new light-duty trucks weighing up to 3,750 lbs. (lvw) manufactured in model year 1995 and thereafter and sold (in ozone nonattainment areas having a 1988 ozone design value at or above 0.180 parts per million and having a 1980 population of 250,000 or more) at the first retail sale in such areas shall be clean fuel vehicles unless the Administrator has approved a substitute program under section 183(c)(3) (B). For purposes of identifying such areas, the design value shall be calculated according to the most recent interpretation methodology issued by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) Program application.—Subject to provisions of paragraph (3), paragraph (1) may apply to any Serious ozone nonattainment area (as classified under subpart 2 of part D of title I) at the request of the Governor of the State in which the area is located upon the approval of the Administrator. The Administrator shall approve by rule any such request where the Governor of the State has made a determination that inclusion of the area in the clean fuel vehicle program is appropriate and would result in progress toward attainment of the national ambient air quality standard for ozone and the Administrator finds in such rule that such request is reasonable, taking into consideration the manufacturer's projection and availability of clean alternative fuels, and such determination is not arbitrary or capricious. Any additional requirements resulting from such approval shall become applicable after such period as the Administrator finds in such rule necessary for the requisite vehicles and fuels to be made available, giving appropriate consideration to model availability and the cost of compliance within such period.

“(3) Public hearing.—In promulgating any regulation under this section, the Administrator shall hold at least one public hearing and shall consider the ozone, toxic and global warming benefits of the program; safety and public health issues and measures necessary to avoid any risks involved; technology, cost effectiveness, clean alternative fuel availability, results of public and private research and testing, capability of manufacturers of vehicles and fuel providers to make available such fuels and vehicles; ways to ensure customer acceptance; the expected cold start performance, serviceability, maintenance, durability, and reliability of the vehicles likely to be produced; other environmental, economic, energy, national security, and safety implications of the program; along with the results of ongoing programs demonstrating the use of motor vehicles operated on clean alternative fuels.

“(e) EPA Determination.—The requirements prescribed under subsections (c) (relating to availability of clean alternative fuel) and (d) (relating to the clean-fuel vehicle program) shall be delayed by up to 2 years if the Administrator determines—

“(1) within 30 months of the date of the enactment of the Clean Air Act Amendments of 1990 that a delay will substantially advance the technology, improve the benefits, or lower the costs of the clean-fuel vehicle program, or will ensure that the manufacturers and fuel providers will have a minimum of 3 full model years after promulgation of regulations under subsections (b), (c) and (d), or

“(2) that a delay is appropriate due to the likelihood of a national economic recession.

“(f) Fleet Vehicle Program.—

“(1) Clean-fuel fleet vehicles.—

“(A) Passenger cars and light-duty trucks of up to 3,750 lbs. (lvw).—For purposes of this subsection, the term ‘clean-fuel fleet vehicle’ means a clean fuel vehicle that meets the applicable requirements of subsection (b) and meets a standard for ozone-forming volatile organic compounds that requires that total vehicle emissions of ozone-forming volatile organic compounds not exceed the level set forth in table 2, in the case of all passenger cars and light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of up to 3,750 lbs., manufactured in the applicable model year:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(B) Phase 2.—Under Phase 2, clean-fuel fleet vehicles referred to in subparagraph (A) shall also meet a reduction in emissions of other substances (as described under subsection (b)(2)(B)) of a percentage to be determined by the Administrator, by rule, that may reasonably be expected to result from the use of clean alternative fuel and clean-fuel vehicle technologies that comply with the ozone-forming VOC standards prescribed under Phase 2 or as revised under subparagraph (C).

“(C) Adjustment of phase 2 reduction.—The Administrator may in response to a petition filed by a manufacturer or fuel provider, or on the Administrator's own motion, by rule adjust the Phase 2 level specified in table 2 of subparagraph (A) from 0.25 gpm to not greater than 0.53 gpm if the Administrator determines in such rule that such adjustment is appropriate, giving consideration to the need to provide for attainment of the national ambient air quality standard for ozone in the areas to which this subsection applies and the technical and economic feasibility, of achieving a 0.25 gpm standard taking into consideration adequate lead time, energy, noise, and safety factors. Unless the Administrator promulgates under this subparagraph a standard of 0.53 gpm for total ozone forming volatile organic compounds, the Administrator may, in order to achieve the reduction required under this subparagraph, by rule, waive the standard for oxides of nitrogen applicable to any class or category of vehicles or engines in Phase II and establish a different standard under this title, except that such standard shall not exceed, in the case of passenger cars and light duty trucks up to 3,750 loaded vehicle weight (lvw) 0.7 grams per mile (gpm).

“(D) Fleet vehicles with lvw above 3,750.—The Administrator shall, by rule, establish standards under this subsection for emissions of ozone-forming volatile organic compounds from clean-fuel fleet vehicles manufactured in model years 1995 and thereafter with a gross vehicle weight rating of 8,500 lbs. or less with a loaded vehicle weight (lvw) of 3,751 lbs. or more but less than or equal to 5,750 lbs. (lvw) loaded vehicle weight. In addition, the Administrator may at any time, by rule, establish such standards for clean-fuel fleet vehicles with a gross vehicle weight rating (gvwr) of 8,501 lbs. or more. The standards referred to in this paragraph shall be comparable to the standards under subparagraph (A) or, as revised, under subparagraph (B). The phase-in under paragraph (2)(C) shall apply to vehicles described in this subparagraph in the same manner as to light-duty vehicles referred to in paragraph (2)(C). The Administrator shall provide lead time of 4 full model years after promulgation.

“(2) State implementation plan revision for areas with design value 0.18 or higher.—(A) Each State in which there is located all or part of an ozone nonattainment area subject to the clean-fuel vehicle program under subsection (d) or a consolidated Metropolitan Statistical Area (as defined by the United States Office and Management and Budget) located at an altitude greater than 4,000 feet and having a 1980 population of 300,000 or more shall prepare and submit, pursuant to section 110 and part D, a revision of its implementation plan for each such area providing for effective implementation and enforcement of the requirements of this subsection with respect to covered fleets. The revision shall include mechanisms to facilitate the transfer of credits under paragraph (6). Except in the case of an area referred to in subparagraph (B), the plan revision shall be submitted within 30 months after the date of the enactment of the Clean Air Act Amendments of 1990.

“(B) Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall extend by rule the requirements of this subsection to any Serious ozone nonattainment area not subject to the clean fuel vehicle program under subsection (d) if the area is of comparable size and population to the areas subject to such program under subsection (d) and if the Administrator finds in such rule that extending such requirement is needed for attainment of the national primary ambient air quality standard for ozone in such area, taking into consideration the applicable State implementation plan in effect under title I, and other relevant factors.

“(C) The plan revision required under this subsection shall contain provisions requiring at least 30 percent of all new light-duty vehicles that are covered fleet vehicles acquired for use in the area by the operator of each covered fleet beginning with vehicle model year 1995, at least 50 percent of such vehicles in model year 1997, and at least 70 percent in model year 1998 and each model year thereafter be clean-fuel fleet vehicles and require (consistent with the requirements of this section regarding retail sales of fuel) fuel providers in such area to make available and accessible clean alternative fuels for such vehicles. The plan revision required under this subsection shall contain provisions substituting a 3 full model year phase-

in schedule for Phase 2 vehicles at 0.25 gpm. At any time after plans are required to be submitted under this paragraph, the Administrator may by rule increase the minimum percentage of the new vehicles purchased or leased subject to the requirement of this paragraph beginning in model year 2000 or thereafter as necessary to ensure that the maximum feasible percentage of covered fleet vehicles in the area are clean-fuel fleet vehicles and operate on clean alternative fuels.

“(D) Each State shall develop such plan in consultation with fleet operators, motor vehicle and engine manufacturers, fuel providers, including fuel producers and distributors, and other interested persons and shall take into consideration the covered fleet vehicles operational range, specialty uses, vehicle and fuel availability (including fueling practices of such operator's fleet), conversion capability, costs, safety, resale value of vehicles and equipment, and other relevant factors. If a State determines, based on such factors, that the requirements of this subsection cannot be feasibly achieved or would create an undue economic hardship for the State or such fleets, the State may include a lesser percentage of clean-fuel fleet vehicles than required by subparagraph (C) in its implementation plan. The Administrator shall consider and address such factors in any such rule under subparagraph (C).

“(E) The choice of a clean-fuel fleet vehicle from available vehicles and a clean alternative fuel shall be made by the fleet owner or operator subject to the requirements of this subsection and the availability of such vehicles and fuels by motor vehicle manufacturers and fuel providers.

“(3) Vehicle availability exemption.—The Administrator shall establish by rule (not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990) standards to be used to determine the availability of suitable clean-fuel fleet vehicles, taking into consideration vehicle size and type, driving range, cargo area, capacity, Federal and State axle and gross weight limits, engine performance, unique requirements for vehicle use, and other factors which may create undue economic hardship for covered fleet operators. The Administrator shall include in such rule a procedure under which a State or the Administrator shall, upon a showing by a fleet operator that suitable clean-fuel fleet vehicles or clean alternative fuels are not reasonably available from, as appropriate, a vehicle manufacturer or fuel provider, exempt such operator from the requirements of this subsection for a period of one year. The fleet operator may certify annually thereafter that such suitable clean-fuel fleet vehicles or clean alternative fuels are not available, and the State or the Administrator shall thereupon provide further annual exemption from the requirements of this subsection upon such certification, unless the Administrator or the State finds that the standards established under subparagraphs (A) and (B) can be met.

“(4) Emission reduction credits.—The Governor shall issue appropriate credits to each fleet operator for the use of clean-fuel fleet vehicles in excess of the percentage required under this subsection or for the use of clean fuel vehicles which have emissions lower than required under subparagraph (A), (B), or (C) of paragraph (1) of this subsection. The Governor shall also issue appropriate credits to operators of clean-fuel fleet vehicles within the nonattainment area but not subject to the requirements of this subsection. Any person granted such credits may trade, sell, or otherwise transfer some or all of such credits to a fleet operator who may use such credits to demonstrate compliance with the requirements of this subsection.

“(5) Transportation control credits.—The Administrator shall, by rule, ensure that transportation control measures that restrict vehicle usage do not apply to any covered fleet vehicle that is a clean-fuel vehicle meeting the applicable requirements of this subsection. Any State which obligates the operator of a clean-fuel fleet vehicle in compliance with this subsection to comply with the transportation control measures specified in section 108(f)(1)(A)(viii) (relating to high occupancy vehicles) or (i) (relating to trip-reduction ordinances) may not credit toward the percent emission reduction requirement achieved under section 183(b)(3)(B) any emission reduction pursuant to this subsection. Notwithstanding the provisions of the previous sentence, a State may credit under section 183(b)(3)(B) any emission reductions pursuant to this subsection if the State demonstrates to the satisfaction of the Administrator that any increase in emissions which would result from traffic congestion caused by the operation of such fleet vehicles exceeds the emission reductions attributable (directly or indirectly) to the use of clean fuel fleet vehicles under this subsection.

“(6) Voluntary compliance.—(A) For purposes of this paragraph, the Administrator may, on the Administrator's own motion or in response to a petition from any person, establish voluntary standards for emissions of ozone-forming volatile organic compounds for any class or category of covered fleet vehicles over 8,500 lbs. gross vehicle weight rating (gvwr) which are not otherwise subject to standards under paragraph (1). The standards prescribed under this subparagraph shall be comparable to the standards under paragraph (1).

“(B) The operator of any covered fleet vehicles meeting the voluntary standards under subparagraph (A) may elect to have those vehicles operating within an area subject to paragraph (2) treated the same as a clean-fuel fleet vehicle for purposes of paragraphs (4) and (5), and the State shall take into account the emissions reductions directly attributable to voluntary compliance under this paragraph. Once such an election has been made, the operator and the vehicles covered by the election shall be subject to the same obligations and conditions as if the vehicles were subject to a standard under paragraph (1).

“(7) Application of other provisions.—This subsection shall not apply to urban buses subject to subsection (a) or to Federal Government fleets subject to subsection (h).

“(g) Oxygenated Fuels.—

“(1) Moderate co areas with design value above 12.7.—Each State in which there is located all or part of an area classified under section 186 as a Moderate Area for carbon monoxide which has for the most recent year a carbon monoxide design value at or above 12.7 parts per million at the time of classification (as calculated according to the most recent methodology issued before the date of the enactment of the Clean Air Act Amendments of 1990 by the Administrator) shall submit to the Administrator a State implementation plan revision under section 110 and part D of title I for such area. The plan revision shall be submitted within 1 year after the classification of the area. The plan revision shall contain provisions to require that gasoline sold, supplied, offered for sale or supply, dispensed, transported or introduced into commerce be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide (as determined by the Administrator), to contain not less than 2.0 percent oxygen. The revision shall provide that such requirement shall take effect no later than October 1, 1993, and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator. The Administrator may waive, in whole or in part, the requirements of this paragraph upon a demonstration by the State to the satisfaction of the Administrator that the use of oxygenated fuels would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide. The Administrator may, upon demonstration by the State satisfactory to him, waive the requirement of this paragraph where he determines that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in an area. Notwithstanding the preceding sentences in this paragraph, the revision described in this paragraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of such standard thereafter in the area and that there is an alternative means to achieve attainment and maintain such standard thereafter in the area that is more cost effective.

“(2) Serious co areas.—(A) In the case of a State in which there is located all or part of an area classified under section 186 as a Serious Area for carbon monoxide, the provisions of section 187(b)(4) of this Act shall be treated as satisfied only if the level of oxygen referred to in such provisions is at least 2.7 percent by weight.

“(B) The Administrator may, in whole or in part, waive the requirements set forth in this paragraph upon a demonstration by the State to the satisfaction of the Administrator that the use of oxygenated fuels which comply with such requirement would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide.

“(3) Waiver.—The Administrator may, upon demonstration by the State satisfactory to him, waive the requirement of subparagraph (A) of paragraph (2) where the Administrator determines that mobile sources of carbon monoxide do not

contribute significantly to carbon monoxide levels in an area. Notwithstanding the requirement of subparagraph (A) of paragraph (2), the revision described in that subparagraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the national primary ambient air quality standard for carbon monoxide by the applicable attainment date and maintenance of such standard thereafter in the area and that there is an alternative means to achieve attainment and maintain such standard thereafter in the area that is more cost effective.

“(4) Fuel dispensing systems.—Any person selling oxygenated fuel at retail pursuant to this subsection shall be required under regulations promulgated by the Administrator to label the fuel dispensing system with a notice that the fuel is oxygenated and will reduce the carbon monoxide emissions from the motor vehicle and indicate such other pertinent information for the benefit of the public.

“(5) Guidelines.—The Administrator shall promulgate guidelines, within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, allowing the use of marketable oxygen credits from fuels with higher oxygen content than required to offset the sale or use of fuels with a lower oxygen content than required.

“(6) Deadline adjustment.—For any area classified as a Serious Area under section 186(b), the Administrator shall adjust the deadlines referred to in this subsection where necessary.

“(7) Construction.—Nothing in this subsection shall be interpreted as requiring an oxygenated fuels program in an area which is in attainment for carbon monoxide and such program is not necessary to maintain such standard thereafter in the area.

“(h) Federal Government Agency Fleets.—

(1) Requirement.—The President, within 180 days after the date of the enactment of the Clean Air Act Amendments of 1990, shall initiate actions providing that each department, agency, or instrumentality of the United States operating passenger cars or light-duty trucks, or both, primarily in Serious, Severe, or Extreme ozone nonattainment areas designated under subpart 2 of part D of title I, shall ensure, subject to applicable Federal procurement and related laws and annual appropriation Acts, that the maximum number of such new vehicles purchased shall be clean-fuel fleet vehicles meeting the requirements of subsection (f) of this section and that such purchases shall meet the following minimum schedule:

“(A) 30 percent of such new vehicles purchased after September 30, 1995 shall be clean-fuel vehicles meeting the requirements of subsection (f).

“(B) 50 percent of such new vehicles purchased after September 30, 1996 shall be clean-fuel vehicles meeting the requirements of subsection (f).

“(C) 70 percent of such new vehicles purchased after September 30, 1998 shall be clean-fuel vehicles meeting the requirements of subsection (f).

The President or the President's delegate may reduce the percentage of such vehicles specified in this paragraph for any model year if the department, agency, or instrumentality concerned demonstrates that the required percentage cannot be feasibly achieved or would impose unreasonable costs for the Government or would impair the mission of a department, agency, or instrumentality. For purposes of this subsection, the provisions of subsections (d)(2) and (d)(3) shall apply to each such department, agency, or instrumentality.

“(2) Authorization of appropriations.—There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this subsection for the fiscal year ending September 30, 1993, and each fiscal year thereafter. Such funds shall be available until expended.

“(3) Required operation.—The President, or the President's delegate, shall before October 1, 1992, issue regulations to ensure that a vehicle acquired pursuant to this subsection—

“(A) shall be supplied with appropriate clean alternative fuel in its primary area of operation, using commercially available fueling facilities to the maximum extent practicable; and

“(B) shall be operated exclusively on such fuel except when operated so as to make it impracticable to obtain such fuel.

“(4) Consideration.—(A) Funds appropriated for carrying out this subsection shall be applied on a priority basis for expenditure first in areas of the United States which the President determines have the most severe air pollution problems.

“(B) A Federal officer or agency responsible for deciding which types of clean fuel vehicles to acquire in order to comply with this subsection shall consider as a factor in such decision which types of vehicles yield the greatest reduction in pollutants emitted per dollar spent in meeting the mission needs of such officer or agency.

“(5) Cost of vehicles to federal agency.—(A) Funds appropriated under this subsection for the acquisition of vehicles under this subsection shall be applicable only—

“(i) to the portion of the cost of vehicles acquired under this subsection which exceeds the cost of comparable conventional fueled vehicles;

“(ii) to the portion of the costs of fuel storage and dispensing equipment attributable to such vehicles which exceeds the costs for such purposes required for conventional fuel vehicles; and

“(iii) to the portion of the costs of operating and maintaining such vehicles which exceeds the costs for such purposes required for comparable conventional fueled vehicles.

“(B) The President or the President's delegate shall ensure that the cost to any Federal agency receiving vehicles under this subsection shall not exceed the cost to such agency of a comparable conventional fueled vehicle.

“(6) Vehicle costs.—The incremental cost of vehicles acquired under this subsection over the cost of comparable conventional fueled vehicles shall not, consistent with applicable law, be applied to any calculation with respect to a limitation under law on the maximum cost of individual vehicles which may be acquired by the United States.

“(7) Exemptions.—The requirements of this subsection shall not apply to any of the following:

“(A) Vehicles being operated as an experiment in the use of alternative fuels other than alcohol, natural gas or other gaseous hydrocarbons, or electricity, or to emergency vehicles or to nonroad vehicles.

“(B) Vehicles with respect to which the President or the President's delegate has claimed an exemption based on national security consideration.

“(C) Vehicles being operated for emergency or law enforcement purposes.

“(8) Superclean federal vehicle demonstration program.—(A) The President shall require that 10 percent of the new vehicles purchased by each department, agency, or instrumentality of the United States subject to this subsection in each of the years 1995, 1996, 1997, 1998, and 1999 shall be experimental vehicles which are designed to emit not more than 0.19 grams per

mile of volatile organic compounds. Such vehicles shall operate on a diversity of alternative fuels. The certification, warranty and recall provisions of sections 206 and 207 of this title shall not apply to such vehicles.

“(B) The President shall establish a program to demonstrate, test, and report on the emissions performance, durability, and reliability of the vehicles purchased under this paragraph.

“(C) In making determinations under other provisions of this section regarding the technical feasibility of meeting emissions standards, the President shall take into account the results of the demonstrations, tests, and reports under subparagraph (B).

“(D) Experimental vehicles purchased under this paragraph shall be considered clean fuel vehicles for purposes of meeting the requirements of this subsection and such vehicles shall be credited towards the number of clean fuel vehicles required to be purchased by departments, agencies, and instrumentalities of the United States.

“(i) Vehicle Conversions.—(1) The requirements of this section may be met through the conversion of existing gasoline or diesel-powered vehicles to a clean-fuel vehicle which comply with the applicable requirements of subsection (f).

“(2) The Administrator shall, consistent with the requirements of this title applicable to new vehicles, promulgate regulations governing such conversions. Such regulations shall establish criteria for such conversions which will ensure that a converted vehicle will, when operating on such clean alternative fuel, comply with the applicable standards under this section. Such regulations shall apply the provisions of sections 206, 207, 208, and 209 to such conversions with such modification of the applicable regulations implementing such sections as the Administrator deems necessary to implement this subsection. Any person who obtains a certification under this paragraph shall be considered a manufacturer for purposes of sections 206 and 207 and related enforcement provisions. Nothing in the preceding sentence shall require a person who obtains a certification under this paragraph to warrant any part or operation of a vehicle other than what is required under sections 206 and 207. Nothing in this paragraph shall serve to limit the applicability of any other warranty to unrelated parts or operations. The Secretary of Transportation shall, if necessary, promulgate rules under applicable motor vehicle laws regarding the safety of converted vehicles.

“(3) The conversion from a vehicle capable of operating on gasoline or diesel fuel only to a clean-fuel vehicle shall not be considered a violation of section 203(a)(3) if such conversion complies with the regulations promulgated under this subsection.

“(4) Nothing in this subsection shall be construed to require such conversions of any motor vehicle in order to achieve compliance with the requirements of subsection (b) or (f).

“(j) Tank and Fuel System Safety.—The Secretary of Transportation shall, in accordance with the National Motor Vehicle Traffic Safety Act of 1966, promulgate applicable regulations regarding the safety and use of fuel storage cylinders and fuel systems, including appropriate testing and retesting, in conversions of motor vehicles.

“(k) Information Collection.—For purposes of enforcing regulations implementing this section, the Administrator may, subject to the provisions of section 208(b), by regulation, require manufacturers, distributors, and retailers of motor vehicles or motor vehicle fuels to establish and maintain records, make reports, and provide information concerning the sales of—

“(1) motor vehicles capable of operating on clean alternative fuel; and

“(2) clean alternative fuels.

Nothing in this subsection shall be construed to limit the Administrator's authority under section 114, 206, or 208.

“(l) California Vehicle Program.—In the case of ozone nonattainment areas in the State of California only, notwithstanding section 209, the State may establish more stringent standards to be applicable under subsections (b) and (f) than the standards referred to in such subsections.

“(m) Reductions in Refueling Emissions.—Reductions in refueling emissions whether achieved from retail fuel dispensing facilities (‘Stage II’) or vehicle-based (‘onboard’) controls shall be considered in the determination of compliance with the reductions in ozone-forming volatile organic compounds and other substances required under this section.

“(n) Reformulated Gasoline for Conventional Vehicles.—(1) Within 24 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administration shall, after holding at least one public hearing, promulgate regulations under section 211 establishing specifications for cleaner gasoline to be used in conventional gasoline fueled vehicles. Such standards shall require the greatest reduction in ozone-forming volatile organic compounds and air toxic emissions achievable through the reformulation of conventional gasoline, taking into consideration the cost of achieving such emission reductions, and health, environmental and energy impacts. The regulations may establish specifications for gasoline intended for use in vehicles manufactured to use leaded gasoline that are different from the specifications established for gasoline intended for use in vehicles manufactured to use unleaded gasoline.

“(2) Beginning January 1, 1995, the Administrator shall require that such reformulated gasoline or cleaner fuels be offered for sale in all ozone nonattainment areas with a 1988 design value at or above 0.18 parts per million (as calculated by the most recent interpretation methodology issued by the United States Environmental Protection Agency before the date of the enactment of the Clean Air Act Amendments of 1990).

“(o) Consultation With Department of Energy and Department of Transportation.—The Administrator shall coordinate with the Secretaries of the Department of Energy and the Department of Transportation in carrying out the Administrator’s duties under this section.”.

(c) Conforming Amendment.—Section 202(a)(4) (42 U.S.C. 7521(a)(4)) is amended by striking out “standards prescribed under this subsection” every place it occurs and inserting “requirements prescribed under this title”.

SEC. 202. EMISSION STANDARDS FOR CERTAIN MOTOR VEHICLES.

(a) Standards.—Section 202 (42 U.S.C. 7521) is amended by adding the following at the end thereof:

“(g) NMHC and CO Standards for Model Years After 1993.—Effective with respect to the model year 1994 and thereafter, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC) and carbon monoxide (CO) from passenger cars and light-duty trucks (LDTs) shall contain standards which provide that emissions from a specified percentage of each manufacturer’s sales volume of such cars and trucks shall comply with the levels specified in table 1. The specified percentage shall be 40 percent in model year 1994, 80 percent in 1995, and 100 percent thereafter.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(h) NO₅x and PM Standards for Model Years After 1993.—Effective with respect to the model years after 1993 in the case of passenger cars, and effective with respect to model years after 1994 in the case of light-duty trucks (LTDs), the regulations under subsection (a) applicable to emissions of oxides of nitrogen (NO₅x) and particulate matter (PM) from such cars and trucks shall contain standards which provide that such emissions from a specified percentage of each manufacturer’s sales volume of such cars and trucks shall comply with the levels specified in table 2. In the case of passenger cars, the specified percentage shall be 40 percent in model year 1994 and 100 percent thereafter. In the case of light-duty trucks, the specified percentage shall be 40 percent in model year 1995 and 100 percent thereafter.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(i) Phase II Study.—(1) The Administrator, with the participation of the Office of Technology Assessment, shall study whether or not further reductions in emissions from passenger cars and light-duty trucks should be required pursuant to this title. The study shall consider whether to establish with respect to model years commencing after January 1, 2003, the standards and useful life period for gasoline and diesel-fueled passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less specified in the following table:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Such study shall also consider other standards and useful life periods which are more stringent or less stringent than those set forth in table 3 (but more stringent than those referred to in subsections (g) and (h)).

“(2)(A) As part of the study under paragraph (1), the Administrator shall examine the need for further reductions in emissions in order to attain or maintain the national ambient air quality standards, taking into consideration the waiver provisions of section 209(b). As part of such study, the Administrator shall also examine—

“(i) the availability of technology (including the costs thereof), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for meeting more stringent emission standards than those provided in subsections (g) and (h) for model years commencing not earlier than after January 1, 2003 and not later than model year 2006, including the lead time and safety and energy impacts of meeting more stringent emission standards; and

“(ii) the need for, and cost effectiveness of, obtaining further reductions in emissions from such passenger cars and light-duty trucks, taking into consideration alternative means of attaining or maintaining the national primary ambient air quality standards pursuant to State implementation plans and other requirements of this Act, including their feasibility and cost effectiveness.

“(B) The Administrator shall submit a report to Congress no later than June 1, 1997, containing the results of the study under this subsection, including the results of the examination conducted under subparagraph (A). Before submittal of such report the Administrator shall provide a reasonable opportunity for public comment and shall include a summary of such comments in the report to Congress.

“(3)(A) Based on the study under paragraph (1) the Administrator shall determine, by rule, within 3 calendar years after the report is submitted to Congress, but not later than December 31, 1999, whether—

“(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

“(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003 and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

“(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

The rulemaking under this paragraph shall commence within 3 months after submission of the report to Congress under paragraph (2)(B).

“(B) If the Administrator determines under subparagraph (A) that—

“(i) there is no need for further reductions in emissions as provided in paragraph (2)(A);

“(ii) the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); or

“(iii) obtaining further reductions in emissions from such vehicles will not be needed or cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall not promulgate more stringent standards than those in effect pursuant to subsections (g) and (h). (Nothing in this paragraph shall prohibit the Administrator from exercising the Administrator's authority under subsection (a) to promulgate more stringent standards for passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less at any other time thereafter in accordance with subsection (a).)

“(C) If the Administrator determines under subparagraph (A) that—

“(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

“(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

“(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall either promulgate the standards (and useful life periods) set forth in table 3 of paragraph (1) or promulgate alternative standards (and useful life periods) which are more stringent than those referred to in subsections (g) and (h). Any such standards (or useful life periods) promulgated by the Administrator shall take effect with respect to any such vehicles or engines no earlier than the model year 2003 but not later than model year 2006, as determined by the Administrator in the rule.

“(D) Nothing in this paragraph shall be construed by the Administrator or by a court as a presumption that any standards (or useful life period) set forth in table 3 shall be promulgated in the rulemaking required under this paragraph. The action required of the Administrator in accordance with this paragraph shall be treated as a nondiscretionary duty for purposes of section 304(a)(2) (relating to citizen suits).

“(E) Unless the Administrator determines not to promulgate more stringent standards as provided in subparagraph (B) or to postpone the effective date of standards referred to in table 3 of paragraph (1) or to establish alternative standards as provided in subparagraph (C), effective with respect to model years commencing after January 1, 2003, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), oxides of nitrogen (NO_x), and carbon monoxide (CO) from motor vehicles and motor vehicle engines in the classes specified in table 3 of paragraph (1) above shall contain standards which provide that emissions may not exceed the pending emission levels specified in table 3 of paragraph (1).”

(b) Conforming Amendment.—Section 202(d)(1) (42 U.S.C. 7521(d)(1)) is amended by inserting “, except as otherwise specifically provided in this title” before the semicolon at the end thereof.

(c) Revised Standards.—Subparagraph (C) of section 202(b)(1) (42 U.S.C. 7521(b)(1)(C)) is amended to read as follows:

“(C) The Administrator may promulgate regulations under subsection (a)(1) revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account. Any revised standard shall require a reduction of emissions from the standard that was previously applicable. Any such revision under this title may provide for a phase-in of the standard.”.

(d) Promulgation.—Section 202(b)(2) (42 U.S.C. 7521(b)(2)) is amended to read as follows:

“(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to the date of the enactment of the Clean Air Act Amendments of 1990), shall be promulgated by regulation within 180 days after such date.”.

SEC. 203. CONFORMING AMENDMENT.

Section 206(f)(1) (42 U.S.C. 7525(f)(1)) is amended by inserting “and light-duty trucks” immediately after “light-duty vehicles and engines”.

SEC. 204. CARBON MONOXIDE EMISSIONS AT COLD TEMPERATURES.

Section 202 (42 U.S.C. 7521) is amended by adding the following new subsection after subsection (i):

“(j) Cold CO Standard.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations under subsection (a) of this section applicable to emissions of carbon monoxide from 1993 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit. The regulations shall contain standards which provide that emissions of carbon monoxide from a manufacturer's vehicles when operated at 20 degrees Fahrenheit may not exceed, in the case of light-duty vehicles, 10.0 grams per mile, and in the case of light-duty trucks, a level comparable in stringency to the standard applicable to light-duty vehicles. The standards also shall provide that each manufacturer's light-duty vehicle and light-duty truck fleets shall comply with applicable standards according to the following schedule: at least 40 percent of 1993 model year vehicles shall comply with applicable standards; at least 80 percent of 1994 model year vehicles shall comply with applicable standards; and 100 percent of 1995 and later model year vehicles shall comply with applicable standards.

“(2)(A) Not later than December 31, 1993, the Administrator shall complete a study assessing the need for further reductions in emissions of carbon monoxide and the maximum reductions in such emissions achievable from 1998 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit.

“(B) The Administrator may promulgate (and from time to time revise) regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from 1998 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit, as needed to protect public health and welfare, taking costs into account.

“(3) The Administrator also may promulgate regulations under subsection (a)(1) applicable to emissions of carbon monoxide from heavy-duty vehicles and engines when operated at cold temperatures.”.

SEC. 205. EVAPORATIVE EMISSIONS.

Section 202 (42 U.S.C. 7521) is amended by adding the following new subsection after subsection (j):

“(k) Control of Evaporative Emissions.—The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles—

“(1) during operation; and

“(2) over 2 or more days of nonuse;

under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility, and to cost, energy, and safety factors associated with the application of the appropriate technology. The Administrator shall commence a rulemaking under this subsection within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990. If final regulations are not promulgated under this subsection within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this Act. Such date certain shall not be later than 15 months after the expiration of such 18 month deadline.”.

SEC. 206. CONTROL OF VEHICLE REFUELING EMISSIONS.

Section 202(a)(6) (42 U.S.C. 7521(a)(6)) is amended to read as follows:

“(6) Onboard vapor recovery.—Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards under this section requiring that all new light-duty motor vehicles manufactured in the third model year after the model year in which the standards are promulgated and thereafter shall be equipped with vehicle-based (‘onboard’) systems for the control of evaporative emissions during vehicle refueling. The Administrator shall determine, in consultation with the Secretary of Transportation, that such systems are safe. The standards shall require that such systems provide a minimum evaporative emission capture efficiency of 95 percent. The requirements of section 182(b)(3) (relating to stage II gasoline vapor recovery) for areas classified under section 181 as moderate for ozone shall not apply after promulgation of such standards and the Administrator may revise or waive the application of the requirements of such section 182(b)(3) for areas classified under section 181 as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems required under this paragraph are in widespread use throughout the motor vehicle fleet.”.

SEC. 207. MOBILE SOURCE-RELATED AIR TOXICS.

Section 202 (42 U.S.C. 7521) is amended by adding the following new subsection after subsection (k):

“(l) Mobile Source-Related Air Toxics.—

“(1) Study.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study of the need for, and feasibility of, controlling emissions of toxic air pollutants which are unregulated under this Act and associated with motor vehicles and motor vehicle fuels, and the need for, and feasibility of, controlling such emissions and the means and measures for such controls. The study shall focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain, including emissions of benzene, formaldehyde, and 1, 3 butadiene. The proposed report shall be available for public review and comment and shall include a summary of all comments.

“(2) Standards.—Within 54 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, based on the study under paragraph (1), promulgate (and from time to time revise) regulations under subsection (a)(1) or section 211(c)(1) containing reasonable requirements to control hazardous air pollutants from motor

vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a), the availability and costs of the technology, and noise, energy, and safety factors, and lead time. Such regulations shall not be inconsistent with standards under section 202(a). The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.”

SEC. 208. EMISSION CONTROL DIAGNOSTICS SYSTEMS.

(a) Emission Control Diagnostics.—Section 202 (42 U.S.C. 7521) is amended by adding the following after subsection (l):

“(m) Emissions Control Diagnostics.—

“(1) Rulemaking.—The Administrator, after consideration of environmental benefits, technology, safety, and economic factors, shall promulgate (and from time to time revise) regulations requiring manufacturers to install on all new motor vehicles and motor vehicle engine diagnostics systems capable of—

“(A) accurately identifying, to the extent practicable, emission-related systems deterioration or malfunction which could cause or result in failure of the vehicle to comply with emission standards established under this section,

“(B) alerting the vehicle's owner or operator to the likely need for emission-related components or systems maintenance or repair,

“(C) storing and retrieving fault codes specified by the Administrator, and

“(D) providing access to stored information in a manner specified by the Administrator.

“(2) Effective date.—The regulations prescribing emission control diagnostics systems under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period and energy and safety factors.

“(3) State inspection.—The Administrator, by regulation, may require States that have implementation plans under section 110 containing motor vehicle inspection and maintenance programs to amend their plans within 2 years of promulgation of the regulations to provide for inspection of emission control diagnostics systems (as prescribed by regulations under paragraph (1) of this subsection) and the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems.

“(4) Emissions control diagnostics.—The Administrator shall, by regulation, require manufacturers—

“(A) to provide standardized connectors through which the emission control diagnostics system is accessed for inspection, diagnosis, service, or repair on all motor vehicles and motor vehicle engines;

“(B) to provide standardized access to the emission control diagnostics system through such connectors which shall be unrestricted and shall not require any access code or any device which is only available from a vehicle manufacturer; and

“(C) to provide standardized output of the data from the emission control diagnostics system through such connectors to a scanning device which shall be usable without the need for any unique decoding information or device.

“(5) Information availability.—The Administrator, by regulation, shall require (subject to the provisions of section 208(c) regarding the protection of methods or processes entitled to protection as trade secrets) manufacturers, including motor vehicle or motor vehicle engine manufacturers, to make available in a timely manner, under reasonable terms and conditions to any person engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines any information reasonably necessary to utilize fully the emission control diagnostic system and to make effective emissions related repairs and service. No such information may be withheld under section 208(c) if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines. Such information shall also be available to the Administrator, subject to section 208(c), in carrying out the Administrator's responsibilities under this section.

“(6) Review of data.—The Administrator may, in promulgating regulations under this section, review data output from emission control diagnostic systems and revise such regulations to improve the emissions repair effectiveness by use of such data. In the review process, the Administrator should consult with the industry, including vehicle manufacturers, parts manufacturers, diagnostic equipment manufacturers, and motor vehicle repair service providers, regarding the quality and usefulness of the data provided by the emission control diagnostic system, technology developments in motor vehicle emission control diagnostics, and any other matters that would lead to improving the effectiveness of emission control systems repairs and maintenance.

“(7) Brand, corporate, and trade names.—The Administrator, in promulgating regulations under this subsection, shall require that information and data from the emissions control diagnostics systems not require the use of any component or service which is identified by brand, trade, or corporate name, as provided by subparagraphs (A) and (B) of section 207(c)(3).

“(8) Rulemaking.—The Administrator shall commence a rulemaking under this subsection within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990. If the final regulations under this subsection are not promulgated within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this Act. Such date certain shall not be later than 15 months after such 18-month deadline.”.

(b) Scheduled Replacement.—The last sentence of section 207(a)(3) (42 U.S.C. 7541(a)(3)) is amended to read as follows: “The term ‘designed for emission control’ as used in the preceding sentence means a catalytic converter, a thermal reactor, an emission control diagnostics system, or other component installed on or in a vehicle for the sole or primary purpose of reducing vehicle emissions (not including those vehicle components which were in general use prior to model year 1968 and the primary function of which is not related to emission control).”.

SEC. 209. AUTO WARRANTIES.

Section 207 (42 U.S.C. 7541) is amended as follows:

(1) Strike out “useful life (as determined under section 202(d))” each place it appears in subsection (b) and insert “the warranty period (as determined under subsection (i))”.

(2) Strike so much of section 207(b) as follows the third sentence thereof.

(3) Add the following new subsection at the end thereof:

“(i) Warranty Period.—

“(1) In general.—For purposes of subsection (a)(1) and subsection (b), the warranty period, effective with respect to new motor vehicles and engines manufactured in the model year 1995 and thereafter, shall be the first 2 years or 24,000 miles of use (whichever first occurs), except as provided in paragraph (2).

“(2) Specified major emission control components.—In the case of a specified major emission control component, the warranty period for purposes of subsection (a)(1) and subsection (b) shall be 5 years or 50,000 miles of use (whichever first occurs). As used in this paragraph, the term ‘specified major emission control component’ means only a catalytic converter or electronic emissions control unit. Nothing in this Act shall be construed to provide that any part (other than a part referred to in the preceding sentence) shall be required to be warranted under this Act for the period of 5 years or 50,000 miles referred to in this paragraph.

“(3) Instructions.—Subparagraph (A) of subsection (b)(2) shall apply only where the Administrator has made a determination that the instructions concerned conform to the requirements of subsection (c)(3).”.

(4) Amend subsection (a)(1) by adding the following at the end thereof: “In the case of vehicles and engines manufactured in the model year 1995 and thereafter such warranty shall require that the vehicle or engine is free from any such defects for the warranty period provided under subsection (i).”.

SEC. 210. HEAVY-DUTY TRUCKS.

Section 202(a)(3) (42 U.S.C. 7521(a)(3)) is amended as follows:

(1) Strike subparagraphs (A), (B), (C), (D), and (E) and insert the following:

“(A)(i) Unless the standard is changed as provided in subparagraph (B), regulations under paragraph (1) of this subsection applicable to emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter from classes and categories of heavy-duty vehicles or engines manufactured during or after model year 1983 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.

“(ii) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, or other appropriate factors.

“(B) On the basis of information available to the Administrator concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare, and taking costs into account, the Administrator may promulgate regulations under paragraph (1) of this subsection revising any standard promulgated under or before the date of the enactment of the Clean Air Act amendments of 1990 (or previously revised under this subparagraph).”.

(2) Redesignate subparagraph (F) as subparagraph (C).

(3) Add a new subparagraph (D) to read as follows:

“(D) The Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to him, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emissions from any rebuilt heavy-duty engines (whether or not the engine is past its statutory useful life), which in the Administrator's judgment cause, or contribute to, air pollution

which may reasonably be anticipated to endanger public health or welfare taking costs into account. Any regulation shall take effect after a period the Administrator finds necessary to permit the development and application of the requisite control measures, giving appropriate consideration to the cost of compliance within the period and energy and safety factors.”.

SEC. 211. NONROAD ENGINES AND VEHICLES.

(a) Definitions.—Section 216 (42 U.S.C. 7550) is amended by adding the following at the end thereof:

“(13) Nonroad engine.—The term ‘nonroad engine’ means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 111 or section 202.

“(14) Nonroad vehicle.—The term ‘nonroad vehicle’ means a vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.”.

(b) Definition of Manufacturer.—Paragraph (1) of section 216 (42 U.S.C. 7550) is amended by striking out “new motor vehicles or new motor vehicle engines” every place it occurs and inserting “new motor vehicles, new motor vehicle engines, new nonroad vehicles or new nonroad engines”.

(c) Emission Standards.—Section 213 (42 U.S.C. 7547) is amended to read as follows:

“SEC. 213. NONROAD ENGINES AND VEHICLES.

“(a) Emissions Standards.—(1) The Administrator shall conduct a study of emissions from nonroad engines and nonroad vehicles to determine if such emissions cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such study shall be completed within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) After notice and opportunity for public hearing, the Administrator shall determine within 12 months after completion of the study under paragraph (1), based upon the results of such study, whether emissions of carbon monoxide, oxides of nitrogen, and volatile organic compounds from new nonroad engines or nonroad vehicles are significant contributors to ozone or carbon monoxide concentrations in more than 1 area which has failed to attain the national ambient air quality standards for ozone or carbon monoxide.

“(3) If the Administrator makes an affirmative determination under paragraph (2), within 18 months thereafter the Administrator shall promulgate (and from time to time revise) such regulations as the Administrator deems appropriate containing standards applicable to emissions from those classes or categories of new nonroad engines and new nonroad vehicles which in the Administrator's judgment cause, or contribute to, such air pollution, taking into account costs, noise, safety and energy factors associated with the application of technology which the Administrator determines will be available for the engines and vehicles to which such standards apply. The regulations shall apply to the useful life of the engines or vehicles (as determined by the Administrator).

“(4) If the Administrator determines that any emissions from new nonroad engines or vehicles not covered by paragraph (2) significantly contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, the Administrator may promulgate (and from time to time revise) such regulations as the Administrator deems appropriate containing standards applicable to emissions from those classes or categories of new nonroad engines and new nonroad vehicles which in the Administrator's judgment cause, or contribute to, such air pollution, taking into account costs, noise, safety, and energy factors associated with the application of technology which the Administrator determines will be available

for the engines and vehicles to which such standards apply. The regulations shall apply to the useful life of the engines or vehicles (as determined by the Administrator).

“(b) Effective Date.—Standards under this section shall take effect at the earliest possible date considering the lead time necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period and energy and safety.

“(c) Safe Controls.—Effective with respect to engines or vehicles to which standards under this section apply, no emission control device, system, or element of design shall be used in a new nonroad engine or new nonroad vehicle for purposes of complying with such standards if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function. In determining whether an unreasonable risk exists, the Administrator shall consider factors including those described in section 202(a)(4)(B).

“(d) Enforcement.—The standards under this section shall be subject to sections 206, 207, 208, and 209, with such modifications of the applicable regulations implementing such sections as the Administrator deems appropriate, and shall be enforced in the same manner as standards prescribed under section 202. The Administrator shall revise or promulgate regulations as may be necessary to determine compliance with, and enforce, standards in effect under this section.”.

(d) State Standards.—Section 209 (42 U.S.C. 7543) is amended by adding the following at the end thereof:

“(e) State Standards.—No State or any political subdivision thereof shall adopt or attempt to enforce any standard or other requirement relating to the control of emissions from new nonroad engines or nonroad vehicles subject to regulation under this Act. Subsection (b) shall not apply for purposes of this subsection.”.

SEC. 212. VEHICLE CERTIFICATION.

(a) Additional Testing Procedures.—Section 206(a) (42 U.S.C. 7525(a)) is amended by adding the following after paragraph (3):

“(4)(A) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall revise the regulations promulgated under this subsection to add test procedures capable of determining whether 1993 and later model year light-duty vehicles and light-duty trucks, when properly maintained and used, will pass the inspection methods and procedures established under section 207(b) for that model year, under conditions reasonably likely to be encountered in the conduct of inspection and maintenance programs, but which those programs cannot reasonably influence or control. The conditions shall include fuel characteristics, ambient temperature, and short (30 minutes or less) waiting periods before tests are conducted. The Administrator shall not grant a certificate of conformity under this subsection for any 1993 or later model year vehicle or engine that the Administrator concludes cannot pass the test procedures established under this paragraph.

“(B) From time to time, the Administrator may revise the regulations promulgated under subparagraph (A), as the Administrator deems appropriate.”.

(b) Projected Sales Not Exceeding 300.—Section 206(a)(1) (42 U.S.C. 7525(a)(1)) is amended by striking the third sentence and inserting the following: “In the case of any original equipment manufacturer (as defined by the Administrator in regulations promulgated before the date of the enactment of the Clean Air Act Amendments of 1990) of vehicles or vehicle engines whose projected sales in the United States for any model year (as determined by the Administrator) will not exceed 300, the Administrator shall not require, for purposes of determining compliance with regulations under section 202 for the useful life of the vehicle or engine, operation of any vehicle or engine manufactured during such model year for more than 5,000 miles or 160 hours, respectively, unless the Administrator by regulation prescribes otherwise. The Administrator shall

apply any adjustment factors that the Administrator deems appropriate to assure that each vehicle or engine will comply during its useful life (as determined under section 202(d)) with the regulations prescribed under section 202.”.

SEC. 213. IN-USE COMPLIANCE-RECALL.

Section 207(c) (42 U.S.C. 7541(c)) is amended by adding the following at the end thereof:

“(4) Intermediate in-use standards.—

“(A) Model years 1994 and 1995.—For passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR) which are subject to standards under table 1 of section 202(g) in model years 1994 and 1995 (40 percent of the manufacturer's sales volume in model year 1994 and 80 percent in model year 1995), the standards applicable to NHMC and CO for purposes of this subsection shall be those set forth in table A in lieu of the standards for such air pollutants otherwise applicable under this title, except that any more stringent standards in effect for such purpose before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect until a more stringent standard takes effect as provided in paragraph (5).

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(B) Model years 1996 and 1997.—In the model years 1996 and 1997, passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR) which are not subject to final in-use standards under paragraph (5) (60 percent of the manufacturer's sales volume in model year 1996 and 20 percent in model year 1997) shall be subject to the standards for NHMC and CO for purposes of this subsection set forth in table A in lieu of those set forth in paragraph (5), except that any more stringent standards in effect for such purpose before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect until a more stringent standard takes effect as provided in paragraph (5).

“(C) Useful life.—In the case of the in-use standards applicable under this paragraph for purposes of applying this subsection the applicable useful life shall be 5 years or 50,000 miles or the equivalent (whichever is less).

“(5) Final in-use standards.—After the model year 1995, for purposes of applying this subsection, in the case of the percentage specified in Implementation Schedule B of each manufacturer's sales volume of passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR), the standards applicable to NHMC and CO shall be those set forth in table B in lieu of the standards for such air pollutants otherwise applicable under this title:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 214. COMPLIANCE PROGRAM FEES.

Part A of title II is amended by adding the following new section at the end thereof:

“SEC. 217. MOTOR VEHICLE COMPLIANCE PROGRAM FEES.

“(a) Fee Collection.—Consistent with section 9701 of title 31, United States Code, the Administrator may promulgate (and from time to time revise) regulations establishing fees to recover all reasonable costs to the Administrator associated with—

“(1) new vehicle or engine certification under section 206(a),

“(2) new vehicle or engine compliance monitoring and testing under section 206(b), and

“(3) in-use vehicle or engine compliance monitoring and testing under section 207(c).

The Administrator may establish for all foreign and domestic manufacturers a fee schedule based on such factors as the Administrator finds appropriate and equitable and nondiscriminatory, including the number of vehicles or engines produced under a certificate of conformity.

“(b) Special Treasury Fund.—Any fees collected under this section shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency’s activities for which the fees were collected.

“(c) Limitation on Fund Use.—Moneys in the special fund referred to in subsection (b) shall not be used until after the first fiscal year commencing after the first July 1 when fees are paid into the fund.

“(d) Administrator’s Testing Authority.—Nothing in this subsection shall be construed to limit the Administrator’s authority to require manufacturer or confirmatory testing as provided in this part.”.

SEC. 215. INFORMATION COLLECTION.

Section 208 (42 U.S.C. 7542) is amended to read as follows:

“SEC. 208. INFORMATION COLLECTION.

“(a) Manufacturer’s Responsibility.—Every manufacturer of new motor vehicles or new motor vehicle engines, and every manufacturer of new motor vehicle or engine parts or components, and other persons subject to the requirements of this part, shall establish and maintain records, perform tests where such testing is not otherwise reasonably available under this part (including fees for testing), make reports and provide information the Administrator may reasonably require to determine whether the manufacturer or other person has acted or is acting in compliance with this part and regulations thereunder, or to otherwise carry out the provision of this part, and shall, upon request of an officer or employee duly designated by the Administrator, permit such officer or employee at reasonable times to have access to and copy such records.

“(b) Enforcement Authority.—For the purposes of enforcement of this section and section 207(c), officers or employees duly designated by the Administrator upon presenting appropriate credentials are authorized—

“(1) to enter, at reasonable times, any establishment of the manufacturer, or of any person whom the manufacturer engages to perform any activity required by subsection (a), for the purposes of inspecting or observing any activity conducted pursuant to subsection (a), and

“(2) to inspect records, files, papers, processes, controls, and facilities used in performing any activity required by subsection (a), by such manufacturer or by any person whom the manufacturer engages to perform any such activity.

“(c) Availability to the Public; Trade Secrets.—Any records, reports, or information obtained under this part shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or a particular portion thereof (other than emission data), to which the Administrator has access under this section, if made public, would divulge methods or processes entitled to protection as trade secrets of that person, the Administrator shall consider the record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code. Any authorized representative of the Administrator shall be considered an employee of the United States for purposes of section 1905 of title 18 of the United States Code. Nothing in this section shall prohibit the Administrator or authorized representative of the Administrator from disclosing records, reports or information

to other officers, employees or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act. Nothing in this section shall authorize the withholding of information by the Administrator or any officer or employee under the Administrator's control from the duly authorized committees of the Congress.”.

SEC. 216. FUEL VOLATILITY.

Section 211 (42 U.S.C. 7545) is amended by adding the following new subsection after subsection (g):

“(h) Reid Vapor Pressure Requirements.—(1) Not later than 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations making it unlawful for any person during the high ozone season (as defined by the Administrator) to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi). Such regulations shall also establish more stringent Reid Vapor Pressure standards as the Administrator finds necessary to generally achieve comparable evaporative emissions (on a per-vehicle basis) nationwide, taking into consideration the enforceability of such standards, the need of an area for emission control, and economic factors.

“(2) Such regulations shall provide that the requirements of this subsection shall take effect not later than the high ozone season for 1992, and shall include such provisions as the Administrator determines are necessary to implement and enforce the requirements of this subsection.

“(3) In establishing standards for fuel volatility under this subsection, the Administrator shall permit a 1.0 pound per square inch (psi) tolerance level for gasoline containing at least 10 percent ethanol. A manufacturer or processor of gasoline containing at least 10 percent ethanol shall be deemed to be in full compliance with such standards if the Administrator provides a certification (based on testing) or other evidence acceptable to the Administrator that—

“(A) the gasoline portion of the blend complies with the gasoline volatility standards under this subsection,

“(B) the ethanol portion of the blend does not exceed its waiver conditions under subsection (f)(4), and

“(C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend.

“(4) The provisions of this subsection shall apply only to the 48 contiguous States and the District of Columbia.”.

SEC. 217. DIESEL FUEL SULFUR CONTENT.

Section 211 (42 U.S.C. 7545) is amended by adding the following new subsection after subsection (h):

“(i) Sulfur Content Requirements for Diesel Fuel.—(1) Effective October 1, 1993, no person shall manufacture, sell, supply, offer for sale or supply, dispense, transport, or introduce into commerce motor vehicle diesel fuel which contains a concentration of sulfur in excess of 0.05 per centum (by weight) or which fails to meet a cetane index minimum of 40.

“(2) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations to implement and enforce the requirements of paragraph (1). The Administrator may require manufacturers and importers of diesel fuel not intended for use in motor vehicles to dye such fuel in a particular manner in order to segregate it from motor vehicle diesel fuel.

“(3) The sulfur content of fuel required to be used in the certification of 1991 through 1993 model year heavy-duty diesel vehicles and engines shall be 0.10 percent (by weight). The sulfur content and cetane index minimum of fuel required to be used in the certification of 1994 and later model year heavy-duty diesel vehicles and engines shall comply with the regulations promulgated under paragraph (2).”.

“(4) The States of Alaska and Hawaii may be exempted from the requirements of this subsection in the same manner as provided in section 324. The Administrator shall take final action on any petition filed under section 324 for an exemption from the requirements of this subsection, within 12 months from the date of the petition.”.

SEC. 218A. LEAD SUBSTITUTE GASOLINE ADDITIVES.

(a) Additives.—Section 211 (42 U.S.C. 7545) is amended by adding the following at the end thereof:

“(j) Lead Substitute Gasoline Additives.—(1) After the date of the enactment of the Clean Air Act Amendments of 1990, any person proposing to register any gasoline additive under subsection (a) or to use any previously registered additive as a lead substitute may also elect to register the additive as a lead substitute gasoline additive for reducing valve seat wear by providing the Administrator with such relevant information regarding product identity and composition as the Administrator deems necessary for carrying out the responsibilities of paragraph (2) of this subsection (in addition to other information which may be required under subsection (b)).

“(2) In addition to the other testing which may be required under subsection (b), in the case of the lead substitute gasoline additives referred to in paragraph (1), the Administrator shall develop and publish a test procedure to determine the additives' effectiveness in reducing valve seat wear and the additives' tendencies to produce engine deposits and other adverse side effects. The test procedures shall be developed in cooperation with the Secretary of Agriculture and with the input of additive manufacturers, engine and engine components manufacturers, and other interested persons. The Administrator shall enter into arrangements with an independent laboratory to conduct tests of each additive using the test procedures developed and published pursuant to this paragraph. The Administrator shall publish the results of the tests by company and additive name in the Federal Register along with, for comparison purposes, the results of applying the same test procedures to gasoline containing 0.1 gram of lead per gallon in lieu of the lead substitute gasoline additive. The Administrator shall not rank or otherwise rate the lead substitutive additives. Test procedures shall be established within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990. Additives shall be tested within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990 or 6 months after the lead substitute additives are identified to the Administrator.

“(3) The Administrator may impose a user fee to recover the costs of testing of any fuel additive referred to in this subsection. The fee shall be paid by the person proposing to register the fuel additive concerned. Such fee shall not exceed \$20,000 for a single fuel additive.

“(4) There are authorized to be appropriated to the Administrator not more than \$1,000,000 for the first full fiscal year after the date of the enactment of the Clean Air Act Amendments of 1990 to establish test procedures and conduct engine tests as provided in this subsection. Not more than \$500,000 per year is authorized to be appropriated for 5 subsequent fiscal years.

“(5) Any fees collected under this subsection shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency's activities for which the fees were collected.”.

SEC. 219. NONROAD FUELS.

(a) Fuels and Fuel Additives.—Section 211(a) (42 U.S.C. 7545(a)) is amended by inserting “(including any fuel or fuel additive used exclusively in nonroad engines or nonroad vehicles)” immediately after “fuel or fuel additive”.

(b) Analytical Techniques.—Section 211(b)(2)(B) (42 U.S.C. 7545(2)(B)) is amended by striking “or” after “vehicle” and inserting in lieu thereof a comma, and by inserting immediately after “vehicle engine,” the phrase: “nonroad engine or nonroad vehicle.”.

(c) Regulation.—Section 211(c)(1) (42 U.S.C. 7545(c)(1)) is amended by striking “or” after “motor vehicle” and inserting in lieu thereof a comma, and by inserting immediately after “motor vehicle engine” a comma followed by “or nonroad engine or nonroad vehicle”.

SEC. 220. FUEL WAIVERS.

(a) Coverage.—Section 211(f)(1) (42 U.S.C. 7545(f)(1)) is amended by inserting “(A)” immediately after “(1)” and by adding the following new subparagraph at the end thereof:

“(B) Effective upon the date of the enactment of the Clean Air Act Amendments of 1990, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206.”.

(b) Conforming Amendment.—Section 211(f)(3) (42 U.S.C. 7545(f)(3)) is amended by inserting “(A)” immediately after “(1)”.

SEC. 221. MARKET-BASED ALTERNATIVE CONTROLS.

Section 214 (42 U.S.C. 7548) is amended to read as follows:

“SEC. 214. MARKET-BASED ALTERNATIVE CONTROLS.

“(a) Alternative Controls in Some Ozone Nonattainment Areas.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations that, to the maximum extent feasible and notwithstanding any other section of this title, allow any fuel refiner to control emissions from motor vehicle fuels by one or more means different in type or degree from, and instead of, emission control measures prescribed under this title and section 182(b)(3) (relating to stage II refueling vapor recovery), so long as the alternative control measures achieve at least the same emissions reductions (as determined by the Administrator) over the same time period as the control measures that they would replace. The regulations shall establish performance standards for motor vehicle fuels marketed in areas described under section 212(d). The Administrator shall base such performance standards on the emission reductions that, in the Administrator's judgment, may reasonably be anticipated to result from implementation of the control measures for which motor vehicle fuel refiners may substitute alternative controls under this subsection. The regulations shall provide that any fuel refiner may substitute alternative control measures if it demonstrates, and the Administrator finds, that the combination of control measures that it would employ (including any prescribed control measures) would at least meet the performance standard applicable to it. Any fuel refiner seeking approval of alternative control measures must submit a proposal to the Administrator within 24 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator must approve or disapprove any such proposal within 30 months of the date of the enactment of such Amendments. The Administrator shall publish any proposal to employ alternative control measures submitted by a fuel refiner in the Federal Register upon receipt. Such notice shall constitute a notice of proposed rulemaking on whether to approve or disapprove the

proposal and be deemed to comply with the requirements concerning notice of proposed rulemaking contained in sections 553 through 557 of title 5 of the United States Code (relating to notice and comment). Until the Administrator finds that the refiner has succeeded in demonstrating that it would at least meet the performance standard, the refiner shall remain subject to all of the applicable requirements prescribed under this title. The regulations also shall provide for enforcement of alternative control measures approved under this subsection.

“(2) The regulations promulgated under this subsection shall allow to the maximum extent feasible fuel refiners to demonstrate compliance with the performance standards prescribed under paragraph (1) through averaging of reductions of ozone-producing emissions among fuel refiners, and over time, so long as averaging would achieve at least the same emissions reductions (as determined by the Administrator) as would be achieved by compliance with such performance standards in the absence of such averaging. Such regulations shall not permit manufacturers to comply with the requirements of this title through averaging of emission levels required to be achieved by vehicles manufactured by such manufacturers.

“(b) Nationwide Alternative Controls.—The Administrator may promulgate regulations that, notwithstanding any other section of this title, allow any fuel refiner to control emissions from motor vehicles fuels by one or more means different in type or degree from, and instead of, emission control measures prescribed under this title or section 182(b)(3) (relating to stage II refueling vapor recovery), if first it demonstrates, and the Administrator finds, that the alternative control measures it would employ would achieve at least the same emissions reductions (as determined by the Administrator) over the same time period as the control measures that they would replace. The regulations promulgated under this subsection may also permit fuel refiners and fuel marketers to demonstrate compliance with applicable control measures through averaging of reductions of ozone-producing emissions among fuel refiners and fuel marketers, and over time, so long as such averaging would achieve at least the same emissions reductions (as determined by the Administrator) as would be achieved by compliance with such performance standards in the absence of such averaging. The regulations shall also provide for enforcement of alternative control measures approved under this section.”.

SEC. 222. STATE FUEL REGULATION.

(a) In General.—Section 211(c)(4)(A) (42 U.S.C. 7545(c)(4)(A)) is amended as follows:

- (1) Strike out “use of a” and insert “any characteristic or component”.
- (2) In clause (i) after “control or prohibition” insert “of the characteristic or component of a fuel or fuel additive”.
- (3) In clause (ii) after “such” insert “characteristic or component of a”.

(b) Finding of Necessity.—Section 211(c)(4)(C) (42 U.S.C. 7545(c)(4)(C)) is amended by adding the following at the end: “The Administrator may find that a State control or prohibition is necessary to achieve that standard if no other measures that would bring about timely attainment exist, or if other measures exist and are technically possible to implement, but are unreasonable or impracticable. The Administrator may make a finding of necessity under this subparagraph even if the plan for the area does not contain an approved demonstration of timely attainment.”.

SEC. 223. ENFORCEMENT.

(a) Inspections and Testing.—Section 203(a)(2) (42 U.S.C. 7522(a)(2)) is amended to read as follows:

“(2)(A) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under section 208;

“(B) for any person to fail or refuse to permit entry, testing or inspection authorized under section 206(c) or section 208;

“(C) for any person to fail or refuse to perform tests, or have tests performed as required under section 207(c) or section 208;”.

(b) Tampering With Vehicle Emission Controls.—(1) Section 203(a)(3) (42 U.S.C. 7522(a)(3)) is amended to read as follows:

“(3)(A) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser; or

“(B) for any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use; or”.

(2) At the end of section 203(a) (42 U.S.C. 7522(a)) insert the following: “No action with respect to any device or element of design referred to in paragraph (3) shall be treated as a prohibited act under that paragraph if (i) the action is for the purpose of repair or replacement of the device or element, or is a necessary and temporary procedure to repair or replace any other item and the device or element is replaced upon completion of the procedure, and (ii) such action thereafter results in the proper functioning of the device or element referred to in paragraph (3). No action with respect to any device or element of design referred to in paragraph (3) shall be treated as a prohibited act under that paragraph if the action is for the purpose of a conversion of a motor vehicle for use of a clean alternative fuel (as defined in this title) and if such vehicle complies with the applicable standard under section 202 when operating on such fuel, and if in the case of a clean alternative fuel vehicle (as defined by rule by the Administrator), the device or element is replaced upon completion of the conversion procedure and such action results in proper functioning of the device or element when the motor vehicle operates on conventional fuel.”.

(c) Definition.—Section 216 (42 U.S.C. 7550) is amended by adding the following at the end:

“(15) Motor Vehicle or Engine Part Manufacturer.—The term ‘motor vehicle or engine part manufacturer’ as used in sections 207 and 208 means any person engaged in the manufacturing, assembling or rebuilding of any device, system, part, component or element of design which is installed in or on motor vehicles or motor vehicle engines.”.

(d) Civil and Administrative Penalties.—Section 205 (42 U.S.C. 7524) is amended to read as follows:

“SEC. 205. CIVIL PENALTIES.

“(a) Violations.—Any person who violates sections 203(a)(1) or 203(a)(4), any manufacturer or dealer who violates section 203(a)(3)(A), or any person who violates regulations prescribed under sections 212 (a), (b), (f), or (i) shall be subject to a civil penalty of not more than \$25,000. Any person other than a manufacturer or dealer who violates section 203(a)(3)(A) or any person who violates section 203(a)(3)(B) shall be subject to a civil penalty of not more than \$2,500. Any such violation with respect to paragraph (1), (3)(A), or (4) of section 203(a) shall constitute a separate offense with respect to each motor vehicle or motor vehicle engine. Any such violation with respect to section 203(a)(3)(B) shall constitute a separate offense with respect to each part or component. Any person who violates section 203(a)(2), or regulations prescribed under section 212(c), shall be subject to a civil penalty of not more than \$25,000 per day of violation.

“(b) Civil Actions.—The Administrator may commence a civil action to assess and recover any civil penalty under subsection (a) of this section, section 211(d), or section 213(d). Any action under this subsection may be brought in the district court of the United States for the district in which the violation is alleged to have occurred or in which the defendant resides or has the Administrator's principal place of business, and the court shall have jurisdiction to assess a civil penalty. In determining the amount of any civil penalty to be assessed under this subsection, the court shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with this title, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

“(c) Administrative Assessment of Certain Penalties.—

“(1) Administrative penalty authority.—In lieu of commencing a civil action under subsection (b), the Administrator may assess any civil penalty prescribed in subsection (a) of this section, section 211(d), or section 213(d), except that the maximum amount of penalty sought against each violator in a penalty assessment proceeding shall not exceed \$200,000, unless the Administrator and the Attorney General jointly determine that a matter involving a larger penalty amount is appropriate for administrative penalty assessment. Any such determination by the Administrator and the Attorney General shall not be subject to judicial review. Assessment of a civil penalty under this subsection shall be by an order made on the record after opportunity for a hearing in accordance with sections 554 and 556 of title 5 of the United States Code. The Administrator shall issue reasonable rules for discovery and other procedures for hearings under this paragraph. Before issuing such an order, the Administrator shall give written notice to the person to be assessed an administrative penalty of the Administrator's proposal to issue such order and provide such person an opportunity to request such a hearing on the order, within 30 days of the date the notice is received by such person. The Administrator may compromise, or remit, with or without conditions, any administrative penalty which may be imposed under this section.

“(2) Determining amount.—In determining the amount of any civil penalty assessed under this subsection, the Administrator shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with this title, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

“(3) Effect of administrator's action.—(A) Action by the Administrator under this subsection shall not affect or limit the Administrator's authority to enforce any provision of this Act; except that any violation,

“(i) with respect to which the Administrator has commenced and is diligently prosecuting an action under this subsection, or

“(ii) for which the Administrator has issued a final order not subject to further judicial review and the violator has paid a penalty assessment under this subsection,

shall not be the subject of civil penalty action under subsection (b).

“(B) No action by the Administrator under this subsection shall affect any person's obligation to comply with any section of this Act.

“(4) Finality of order.—An order issued under this subsection shall become final 30 days after its issuance unless a petition for judicial review is filed under paragraph (5).

“(5) Judicial review.—Any person against whom a civil penalty is assessed in accordance with this subsection may seek review of the assessment in the United States District Court for the District of Columbia, or for the district in which the violation is alleged to have occurred, in which such person resides, or where such person's principal place of business is

located, within the 30-day period beginning on the date a civil penalty order is issued by simultaneously sending a copy of the filing by certified mail to the Administrator and the Attorney General. The Administrator shall file in the court a certified copy, or certified index, as appropriate, of the record on which the order was issued within 30 days. The court shall not set aside or remand any order issued in accordance with the requirements of this subsection unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Administrator's assessment of the penalty constitutes an abuse of discretion, and the court shall not impose additional civil penalties unless the Administrator's assessment of the penalty constitutes an abuse of discretion. In any proceedings, the United States may seek to recover civil penalties assessed under this section.

“(6) Collection.—If any person fails to pay an assessment of a civil penalty imposed by the Administrator as provided in this subsection—

“(A) after the order making the assessment has become final, or

“(B) after a court in an action brought under paragraph (5) has entered a final judgment in favor of the Administrator,

the Administrator shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed (plus interest at rates established pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986 from the date of the final order or the date of the final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of the penalty shall not be subject to review. Any person who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in the first sentence of this paragraph shall be required to pay, in addition to that amount and interest, the United States' enforcement expenses, including attorneys fees and costs for collection proceedings, and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. The nonpayment penalty shall be in an amount equal to 10 percent of the aggregate amount of that person's penalties and nonpayment penalties which are unpaid as of the beginning of such quarter.”.

(e) Enforcement of Fuels Regulations.—Section 211(d) (42 U.S.C. 7545(d)) is amended to read as follows:

“(d) Penalties and Injunctions.—

“(1) Civil penalties.—Any person who violates subsection (a), (f), or (g) of this section or the regulations prescribed under subsection (c), (h), or (i) of this section or the regulations prescribed under subsection 212(c) or who fails to furnish any information or conduct any tests required by the Administrator under subsection (b) of this section shall be liable to the United States for a civil penalty of not more than the sum of \$25,000 for every day of such violation and the amount of economic benefit or savings resulting from the violation. Any violation with respect to a regulation prescribed under subsection (c) of this section or section 212(c) which establishes a regulatory standard based upon a multiday averaging period shall constitute a separate day of violation for each and every day in the averaging period. Civil penalties shall be assessed in accordance with subsections (b) and (c) of section 205.

“(2) Injunctive authority.—The district courts of the United States shall have jurisdiction to restrain violations of subsections (a), (f), and (g) of this section and of the regulations prescribed under subsection (c), (h), or (i) of this section or section 212(c), to award other appropriate relief, and to compel the furnishing of information and the conduct of tests required by the Administrator under subsection (b) of this section. Actions to restrain such violations and compel such actions shall be brought by and in the name of the United States. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.”.

(f) Misfueling.—Section 211(g) (42 U.S.C. 7545(g)) is amended to read as follows:

“(g) Misfueling.—No person shall introduce, or cause or allow the introduction of, leaded gasoline into any motor vehicle which is labeled ‘unleaded gasoline only,’ which is equipped with a gasoline tank filler inlet designed for the introduction of unleaded gasoline, which is a 1990 or later model year motor vehicle, or which that person knows or should know is a vehicle designed solely for the use of unleaded gasoline. Nothing in this section shall limit the applicability of section 211(d)(3).”.

SEC. 224. HIGH ALTITUDE TESTING.

Section 215 (42 U.S.C. 7549) is amended by adding the following at the end thereof:

“(e) High Altitude Testing.—The Administrator shall promptly establish at least one testing center (in addition to the testing centers existing on the date of the enactment of the Clean Air Act Amendments of 1990) located at a site that represents high altitude conditions, to ascertain in a reasonable manner whether, when in actual use throughout their useful life (as determined under section 202(d)), each class or category of vehicle and engines to which regulations under section 202 apply conforms to the emissions standards established by such regulations. For purposes of this subsection, the term ‘high altitude conditions’ refers to high altitude as defined in regulations of the Administrator in effect as of the date of the enactment of the Clean Air Act Amendments of 1990.”.

SEC. 225. TECHNICAL AMENDMENTS.

The Clean Air Act is amended as follows:

(1) In section 202(b)(3) (42 U.S.C. 7521(b)(3)), strike out “(3) For purposes of this part—” and redesignate subparagraphs (A), (B) and (C) of section 202(b)(3) as paragraphs (16), (17), and (18) of section 216, redesignate clauses (i) and (ii) of new paragraph (16) as subparagraphs (A) and (B), respectively, in new subparagraph (B) strike “as provided in clause (i)” and insert “as provided in subparagraph (A)”, and after “by subsection (b)” insert “of section 202”.

(2) Strike out section 202(b)(4) (42 U.S.C. 7521(b)(4)).

(3) Strike out section 202(b)(5) (42 U.S.C. 7521(b)(5)).

(4) In section 202(b)(6) (42 U.S.C. 7521(b)(6))—

(A) strike out “(A)” after “(6)”,

(B) strike out subparagraph (B), and

(C) redesignate paragraph (6) as paragraph (3) and redesignate clauses (i) through (iii) as subparagraphs (A) through (C).

(5) Strike out section 202(b)(7) (42 U.S.C. 7521(b)(7)).

(6) Strike out section 203(c) (42 U.S.C. 7522(c)).

(7) Strike out “announce in the Federal Register and” in section 206(e) (42 U.S.C. 7525(e)).

(8) In section 206(f) (42 U.S.C. 7525(f))—

(A) strike out “(1)” after “(f)”, and

(B) strike out paragraph (2).

(9) In section 207(g) (42 U.S.C. 7526(g)), strike out “(but not designed for emission control under the terms of the last three sentences of section 207(a)(1))” and insert “(but not designed for emission control under the terms of the last sentence of section 207(a)(3))”.

(10) In section 231(a) (42 U.S.C. 7571(a)), strike out paragraph (1) and redesignate paragraphs (2) and (3) as paragraphs (1) and (2), respectively. S6621

TITLE III—HAZARDOUS AIR POLLUTANTS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 301. TECHNOLOGY-BASED STANDARDS FOR HAZARDOUS AIR POLLUTANTS.

Section 112 (42 U.S.C. 7412) is amended to read as follows:

“SEC. 112. HAZARDOUS AIR POLLUTANTS.

“(a) Definitions.—For the purposes of this section—

“(1) Major source.—The term ‘major source’, for pollutants other than radionuclides, means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 metric tons per year or more of any hazardous air pollutant or 25 metric tons per year or more of any combination of hazardous air pollutants which have been listed pursuant to subsection (b). The Administrator may establish a lesser quantity for a major source other than specified in the previous sentence on the basis of the potency, characteristics of the air pollutant, or other relevant factors. For radionuclides, such term shall have the meaning specified by the Administrator by rule, considering radiation dose.

“(2) Area source.—The term ‘area source’ means any source that is not a major source but that is a member of a source category listed under this section based on aggregate emissions, or potential aggregate emissions, of a listed pollutant or pollutants.

“(3) New source.—The term ‘new source’ means a stationary source the construction or reconstruction of which is commenced after the Administrator proposes regulations under this section establishing an emission standard applicable to such source category or subcategory pursuant to subsection (d) or (f).

“(4) Electric utility.—The term ‘electric utility steam generating unit’ means any fossil fuel fired steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the facility.

“(5) Other terms.—The terms ‘stationary source’, ‘owner or operator’, and ‘existing’ source shall have the same meaning as such terms have under section 111(a).

“(b) Hazardous Air Pollutant List.—

“(1) Establishment of list.—The Congress establishes for purposes of this section a list of hazardous air pollutants as follows:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(2) Additions and deletions.—The Administrator may add or delete a substance from the list under paragraph (1).

“(A) Additions.—A substance may be added to the list under paragraph (1) if the Administrator determines in the Administrator's judgment that the substance is an air pollutant and that there is sufficient evidence to establish that the pollutant is known to cause or can reasonably be anticipated to cause in humans one or more of the following:

- “(i) cancer or developmental effects, or
- “(ii) serious or irreversible—
 - “(I) reproductive dysfunctions,
 - “(II) neurological disorders,
 - “(III) heritable gene mutations,
 - “(IV) other chronic health effects, or
 - “(V) adverse acute human health effects.

“(B) Deletions.—The Administrator may delete a pollutant from the list under paragraph (1) if the Administrator determines that the criteria described in subparagraph (A) do not apply. For pollutants on the list which do not have a CAS number and which are comprised of more than one unique chemical substance, the Administrator may determine that one or more of such substances shall not be considered a hazardous air pollutant if the Administrator determines that such substance or substances do not meet the criteria described in subparagraph (A).

“(C) Further information.—If the Administrator determines that information on the health effects of a substance is not sufficient to make a determination required by this paragraph, the Administrator may use any authority available to the Administrator to acquire such information.

“(3) Petitions.—Beginning at any time after the list is published under subsection (c), any person may petition the Administrator to modify the list of hazardous air pollutants under this subsection by adding or deleting a substance. Within 18 months after receipt of a petition, the Administrator shall either grant or deny the petition by publishing a written explanation of the reasons for the Administrator's decision. Any such petition shall include a showing by the petitioner that there is adequate data on the health effects of the pollutant or other evidence adequate to support the petition. The Administrator may not deny a petition solely on the basis of inadequate resources or time for review. No air pollutant which is listed under section 108(a) may be added to the list under this section.

“(4) Review.—The Administrator shall periodically review the list established by this subsection and publish the results thereof and, where appropriate, revise such list by rule.

“(c) Source Category List.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish, and shall from time to time, but no less often than every 8 years, revise, if appropriate, in response to public comment or new information, a list of all categories and subcategories of major sources and area sources designated under paragraph (3) of the air pollutants listed pursuant to subsection (b)(1).

“(2) For the categories and subcategories the Administrator lists, the Administrator shall establish emission standards under subsection (d), according to the schedule in subsection (e).

“(3) The Administrator shall list and designate, based on actual or estimated aggregate emissions of a listed pollutant or pollutants, sufficient categories and subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of each hazardous air pollutant are subject to regulation under this section. For purposes of this section, the term ‘area sources’ shall not include motor vehicles or nonroad vehicles subject to regulation under title II.

“(4) The Administrator may, in the Administrator's discretion, list any category or subcategory previously regulated under this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

“(5) The Administrator may decide not to list a source category or subcategory, and the Administrator may withdraw a source category or subcategory from the list under this subsection, on petition of any person or on the Administrator's own motion, whenever the Administrator makes the following determination or determinations, as applicable:

“(A) In the case of hazardous air pollutants emitted by sources in the category or subcategory that may result in cancer in humans, a determination that no source in the category or subcategory (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

“(B) In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) exceed a level which is adequate to protect public health with an ample margin of safety.

The Administrator shall grant or deny a petition under this paragraph within 1 year after the petition is filed.

“(6) The Administrator shall establish a separate category or subcategory covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. For purposes of this section, ‘research or laboratory facility’ means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

“(d) Maximum Achievable Control Technology Emission Standards.—(1) The Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources in accordance with the schedule provided in subsection (e). The Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards. The Administrator may set standards for emissions of radionuclides from a category or subcategory separately from regulating other listed pollutants emitted by that category or subcategory.

“(2) Emission standards promulgated under this subsection shall be applicable to new and existing major sources and area sources in each category or subcategory, and shall require the maximum degree of reduction in emissions of the air pollutants subject to this section (including a prohibition of such emissions, if achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality and other air quality-related health and environmental impacts, and energy requirements, determines is achievable through application of measures, processes, methods, systems or techniques including measures which—

“(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications such as reuse or recycling;

“(B) enclose systems or processes to eliminate emissions;

“(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point;

“(D) are design, equipment, work practice or operational methods, or radiation dose standards;

“(E) establish requirements for operator training or certification; or

“(F) are a combination of the above.

If the Administrator finds that it is not feasible to prescribe or enforce an emission standard, the Administrator may instead issue regulations requiring any of the measures identified in this paragraph, or any combination of such measures. None of the measures described in subparagraphs (A) through (D) shall, consistent with the provisions of section 114(c), in any way compromise any United States patent or United States trademark right, or any confidential business information, or any trade secret or any other intellectual property right.

“(3) The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emissions standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall be at least as stringent as the emissions controls achieved in practice by the best controlled similar sources. Consistent with the preceding provisions of this paragraph, these determinations for new and existing sources, shall take into account energy, environmental, economic impacts, and other costs as well as any other factors identified by the Administrator by rule. If the Administrator finds that no similar source employs controls reflecting the maximum available control technology, the Administrator may establish emissions standards or regulations meeting the requirements of this section without regard to the performance of similar sources. Emission standards under this section for radionuclides shall be set based upon radiation dose.

“(4) Emission standards or other regulations promulgated under this subsection shall be effective upon promulgation.

“(5) In promulgating emission standards for a source category under this subsection, the Administrator shall prescribe a date for compliance with the standards for existing sources. In no event shall such date be later than 3 years after promulgation of the standards.

“(6) With respect only to categories and subcategories of area sources listed pursuant to subsection (c), the Administrator may, in lieu of the authorities provided in paragraph (2) and subsection (f), elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of listed hazardous air pollutants.

“(7) The Administrator shall from time to time, but no less often than every 8 years after promulgation of standards under this subsection, review and, if appropriate, revise such standards.

“(e) Schedule for Standards.—(1) The Administrator shall promulgate standards for categories and subcategories listed under subsection (c) according to the following schedule:

“(A) Emission standards for not less than 10 categories or subcategories shall be promulgated not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(B) Emission standards for 25 per centum of the listed categories and subcategories shall be promulgated not later than 4 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(C) Emission standards for an additional 25 per centum of the listed categories and subcategories shall be promulgated not later than 7 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(D) Emission standards for the remaining categories and subcategories shall be promulgated not later than 10 years after the date of the enactment of the Clean Air Act Amendments of 1990.

“(E) In the case of source categories and subcategories listed after publication of the initial list required under subsection (c)(1), emission standards under this section for the category or subcategory shall be promulgated within 10 years after the date of the enactment of the Clean Air Act Amendments of 1990, or within 2 years after the date on which such category or subcategory is listed, whichever is later.

“(2) In determining priorities for promulgating standards under subsection (d), the Administrator shall consider—

“(A) the quantity and location of emissions or reasonably anticipated emissions of air pollutants subject to this section that each category or subcategory will emit;

“(B) the known or anticipated adverse effects of such pollutants on public health; and

“(C) the efficiency of grouping categories or subcategories according to the pollutants emitted, or the processes or technologies used.

“(f) Residual Risk.—(1) Not later than 8 years after the date of the enactment of the Clean Air Act Amendments of 1990 the Administrator shall investigate and report, after consultation with the Surgeon General and after an opportunity for public comment, to Congress on:

“(A) Methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d).

“(B) The public health significance of such estimated remaining risk and the technologically and commercially available methods and costs of reducing such risks.

“(C) The actual health effects with respect to persons living in the vicinity of sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assessment methodology or other health assessment technique, and any negative health consequences to the community of efforts to reduce such risks.

“(D) Recommendations as to legislation regarding such remaining risk.

“(2) If Congress does not act on any recommendation submitted under paragraph (1), the Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to subsection (d), promulgate standards for such category or subcategory in accordance with this section (as in effect before the date of the enactment of the Clean Air Act Amendments of 1990) if promulgation of such standards is required in order, in the Administrator's judgment, to provide an ample margin of safety to protect public health in accordance with this section (as in effect before the date of the enactment of the Clean Air Act Amendments of 1990). The Administrator shall determine whether or not to promulgate such standards, and if the Administrator decides to promulgate such standards, shall promulgate the standards, 8 years after promulgation of the standards under subsection (d) for each source category or subcategory concerned. In the case of categories or subcategories for which standards under subsection (d) are required to be promulgated within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall have 9 years after promulgation of standards under subsection (d) to make the determination under the preceding sentence and, if required, to promulgate the standards under this paragraph. Nothing in subsection (c)(5) or (g)(1)(A) or in any other provision of this section shall be construed as affecting, or applying to, the Administrator's interpretation of this section, as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

“(3) Any emission standard established pursuant to this subsection shall become effective upon promulgation.

“(4) No air pollutant to which a standard under this subsection applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source—

“(A) such standard shall not apply until 90 days after its effective date, and

“(B) the Administrator may grant a waiver permitting such source a period of up to 2 years after the effective date of a standard to comply with the standard if the Administrator finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

“(g) Alternative Emissions Limitations.—(1) Notwithstanding the requirements of subsection (d), a State with a program approved under title IV, may issue a permit that authorizes—

“(A) a major source (or area sources in a category or subcategory in an area) to comply with alternative emission limitations in lieu of standards under this section, if the owner or operator presents evidence sufficient to demonstrate that emissions from the source (or such area sources) in compliance with such limitations—

“(i) in the case of hazardous air pollutants emitted by the source (or such area sources) which may result in cancer in humans, do not cause a lifetime risk of cancer greater than one in 1,000,000 to the actual person who is most exposed to emissions of such pollutants from such source (or group of sources in the case of area sources); and

“(ii) in the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer, do not exceed a level which is adequate to protect public health with an ample margin of safety;

“(B)(i) any existing source, for which the owner or operator demonstrates that it has achieved a reduction of 90 percent or more in emissions of listed pollutants (95 percent or more in the case of listed particulate pollutants) from the source before proposal of an applicable standard promulgated pursuant to subsection (d), to meet emission limitations based on such reduction in lieu of such standard for a period of 5 years from the otherwise applicable compliance date; the reduction shall be determined with respect to verifiable and actual emissions on an annual average basis and in a base year not earlier than calendar year 1987, unless emissions in the base year are artificially or substantially greater than emissions in other years before implementation of emissions reduction measures;

“(ii) any existing source to comply with a standard under subsection (d) 5 years after promulgation if the source, within 5 years before proposal of the standard under subsection (d), has achieved a level of emission rate or emission reduction which complies (or would comply if the source is not subject to such standards) with the best available control technology determination (as defined in section 169(3)), which is applicable to the source category and prevailing at the time the reduction is achieved; and

“(iii) any existing source to comply with a standard under subsection (d) 5 years after promulgation if the source, within 5 years before proposal of the standard under subsection (d), has achieved a level of emission rate or emission reduction which complies (or would comply if the source is not subject to such standard) with the lowest achievable emissions rate (as defined by section 171) which is applicable to the source category and prevailing at the time the reduction is achieved.

The Administrator shall review emissions from sources subject to emissions limitations under subparagraph (B) according to subsection (f) at the same time that other sources in the category or subcategory are reviewed.

“(2) The Administrator shall promulgate regulations to carry out paragraph (1) as expeditiously as practicable, but not later than 24 months after the date of the enactment of the Clean Air Act Amendments of 1990.

“(3) Rules published pursuant to paragraph (1) may identify categories or subcategories of sources listed under subsection (c) for which no alternative emission limitations may be established, including categories or subcategories of area sources for which emission standards are promulgated to control combined emissions from sources, rather than emissions of individual sources.

“(4) The regulations under paragraph (1) shall establish methods for assessing the significance of public health risks and methods for evaluating evidence presented by an owner or operator applying for alternative emissions limitations under this subsection. Any modeling demonstration performed to support a showing under subsection (g)(1)(A) shall comply with such regulations. Any stack height credit used in a modeling demonstration shall be based on the lesser of actual stack height of the source as it existed on January 1, 1989, or the stack height credit as provided in regulations issued by the Administrator.

“(5) An existing source which achieves the reduction referred to in paragraph (1)(B)(i) after the proposal of an applicable standard but before January 1, 1994, may qualify under paragraph (1)(B)(i) if the source makes an enforceable commitment to achieve such reduction before the proposal of the standard. Such commitment shall be enforceable to the same extent as a regulation under this section.

“(6) Any State with a program approved under title IV may issue a permit that grants an extension permitting an existing source up to 2 additional years to comply with standards under subsection (d) if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations if the 5-year compliance time is insufficient to dry and cover mining waste in order to reduce emissions of any pollutant listed under subsection (b).

“(7) No alternative emission limitation under this paragraph shall take effect until it is approved by the Administrator.

“(8) If the State in which a source is located does not have a program approved under title IV, the Administrator may grant any extensions authorized under this subsection for such source.

“(h) Preconstruction and Operating Requirements.—After the effective date of any standard or under subsection (d) or (f), or an alternative emission limitation under subsection (g)—

“(1) no person may construct any new major source subject to such emission standard or limitation unless the Administrator, or a State with a permit program approved under title IV, determines that such source, if properly constructed and operated, will comply with the standard or limitation; and

“(2) no person may operate any new or existing source subject to an emission standard or limitation except in compliance with such standard or limitation (and any schedule which is applicable under subsection (d)(5) or (f)(4)).

“(i) Technical Assistance.—The Administrator shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring. The Administrator shall use the authority of section 103 to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks. Where appropriate, such activity shall be conducted with not-for-profit organizations.

“(j) Presidential Exemption.—The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for one or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to each exemption (or extension thereof) made under this subsection.

“(k) Savings Provision.—(1) Any standard under this section in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in force and effect after such date unless modified as provided in this section before the date of the enactment of such Amendments or under such Amendments. Each such standard shall be reviewed and, if appropriate, revised, to comply with the requirements of subsection (d) within 10 years after the date of the enactment of the Clean Air Act Amendments of 1990. If a timely petition for review of any such standard under section 307 is pending on such date of enactment, the standard shall be upheld if it complies with this section as in effect before that date. If any such standard is remanded to the Administrator, the Administrator may in the Administrator's discretion apply either the requirements of this section, or those of this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

“(2) Notwithstanding paragraph (1), no standard shall be established under this section, as amended by the Clean Air Act Amendments of 1990, for radionuclide emissions from (A) elemental phosphorous plants, (B) grate calcination elemental phosphorous plants, (C) phosphogypsum stacks, or (D) any subcategory of the foregoing. This section, as in effect prior to the date of the enactment of the Clean Air Act Amendments of 1990, shall remain in effect for radionuclide emissions from such plants and stacks.

“(3) Notwithstanding section 307 of this Act, no action of the Administrator adding a pollutant to the list under subsection (b), listing or designating a source category or subcategory under subsection (c), or determining whether or not to promulgate a standard under subsection (f)(2), shall be final agency action subject to judicial review, except that any such action may be reviewed under such section 307, if otherwise final, when the Administrator issues emission standards for such pollutant or category.

“(l) Electric Utilities.—The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) after imposition of the requirements of this Act. The Administrator shall report the results of this study to the Congress within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required in this subsection.

“(m) Accident Prevention, Detection, and Response.—

“(1) Regulations and guidance.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate, in consultation and coordination with the Secretaries of Transportation and Labor and the laws administered by the Secretaries, reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases into the ambient air of an air pollutant listed under this subsection from a stationary source subject to standards promulgated under this section and for response to such releases by the owners or operators thereof. The Administrator shall utilize the expertise of such Secretaries and others in promulgating such regulations. As appropriate, such regulations shall cover the use, operation, repair, replacement, and maintenance of equipment to monitor, detect, inspect, and control such releases, including the training of persons in the use and maintenance of such equipment and in the conduct of periodic inspections. The regulations shall include procedures and measures for emergency response after an accidental release in order to protect public health and the environment. The regulations shall cover storage, as well as operations. To ensure effectiveness, reasonableness, and avoidance of duplication, such regulations shall be promulgated and implemented in a manner consistent with other applicable law, including the other provisions of this section, and consolidated to the maximum extent practicable with similar requirements under other law. The regulations shall, to the greatest extent possible, recognize differences in size, operations, processes, class and categories of sources, and the voluntary actions of such sources to prevent such releases and respond to such releases. The regulations shall take effect 3 years after the date of promulgation, or 3 years after the addition of a substance to the list under this subsection, whichever is later.

“(2) List.—As part of the regulations under paragraph (1), the Administrator shall promulgate an initial list of significant air pollutants which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause serious adverse effects to public health and the environment. For purposes of promulgating such list, the Administrator shall use the list of extremely hazardous substances published under the Superfund Amendments and Reauthorization Act of 1986, with such modifications as the Administrator deems appropriate. The list shall include ammonia (CAS Number 7664417) and hydrogen sulfide (CAS Number 7783064). The regulations shall include an explanation of the basis for establishing the list. The list may be revised from time to time by the Administrator and shall be reviewed at least every 5 years. No air pollutant for which a national primary ambient air quality standard has been established shall be included on any such list. No substance, practice, process, or activity regulated under part B shall be subject to regulation under this subsection. At the time any air pollutant is listed, the Administrator shall establish a reasonable minimum quantity for the pollutant, taking into account toxicity, dispersibility, combustibility, or flammability and the likelihood of an accidental release.

“(3) Definitions.—For purposes of this subsection:

“(A) Release.—The term ‘release’ means the direct or indirect introduction of any substance into the ambient air.

“(B) Accidental release.—The term ‘accidental release’ means a release which is not routine and which is not authorized pursuant to any permit or emission limitation or standard under this Act or any other provision of Federal or State law.

“(n) Protection of Great Lakes and Chesapeake Bay.—

“(1) Study and report to congress.—The Administrator shall investigate the sources of atmospheric deposition of hazardous air pollutants (and their atmospheric transformation products) on the Great Lakes, the Chesapeake Bay, and their tributary waters and evaluate the adverse effects to human health and the adverse environmental effects, including the tendency to bioaccumulate and effects resulting from indirect exposure pathways, caused by such deposition. Such investigation and evaluation shall include monitoring of listed substances in the ambient air, biological sampling for such substances (or their organic forms) in fish and wildlife within the Great Lakes, the Chesapeake Bay, and their tributary waters, and an analysis to characterize the sources of such substances. The Administrator shall report to Congress on the results of the investigation and evaluation within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall afford an opportunity for public review of the report before submitting it to Congress and shall include a summary of the public comments with the report.

“(2) Additional regulation.—As part of the report to Congress, the Administrator shall determine whether the other provisions of this section are adequate to prevent serious adverse effects to human health and serious or widespread environmental effects, including such effects resulting from indirect exposure pathways, associated with atmospheric deposition on the Great Lakes, the Chesapeake Bay, and their tributary waters of hazardous air pollutants (and their atmospheric transformation products). The Administrator shall take into consideration the tendency of such pollutants to bioaccumulate. Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, based on such report and determination, promulgate, in accordance with this section, such further emissions standards or control measures as may be necessary and appropriate to prevent such effects, including effects due to bioaccumulation and indirect exposure pathways.

“(o) Technical Assistance for Small Sources.—The Administrator (and States with permit programs) shall establish means and measures to supply technical assistance and information to area sources and stationary sources that are not major stationary sources to help carry out the requirements of this section, including meeting the applicable standards and obtaining needed permits. The assistance should cover information on availability and types of equipment, measures, methods, practices, processes, and techniques in reducing emissions of air pollutants and preventing and detecting accidents. The Administrator should establish and maintain a clearinghouse of such information.

“(p) Hydrofluoric Acid.—(1) Not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study to determine if there is a net benefit to public safety, human health, and the environment from the use by oil refineries of any substance or process which is an alternative to hydrofluoric acid. The study shall include an analysis of the loss of human life or damage to human health in the event of a reasonable worst-case accidental release of hydrofluoric acid or sulfuric acid or other alternative substance, the customary air and water emissions associated with the use of hydrofluoric acid or sulfuric acid or other alternative, the production of waste from the customary use of hydrofluoric acid or sulfuric acid or other alternative, and the risk and consequences of accidents from the transportation of hydrofluoric acid or sulfuric acid or other alternative. In making the determination regarding net benefit, the Administrator shall not consider the financial costs associated with the use of any alternative accidental release mitigation systems which could be rendered inoperable in the event of an earthquake, or the cause of a worst-case accidental release. In making the determination regarding net benefit, if the Administrator considers the likelihood of the risk or danger to human health and the environment from a worst-case accidental hydrofluoric acid release, the Administrator shall also consider similar probabilities resulting from the use of any alternative. In the event that existing data on hydrofluoric acid or sulfuric acid or alternative proves inadequate for the study, the Environmental Protection Agency shall perform the necessary data collection or field tests. The study shall examine both acute and chronic risks.

“(2) If the Administrator determines there is an alternative that provides a net benefit to public safety, human health, and the environment, not later than 1 year and 3 months after the completion of the study under paragraph (1), the Administrator shall promulgate regulations requiring each oil refinery in the Nation to convert to such alternative within 10 years. The Administrator is authorized to make differing determinations on a site-specific basis.

“(3) Not later than 2 years after the completion of the study under paragraph (1), the Administrator shall make recommendations to Congress, and is authorized to promulgate regulations to implement, methods to mitigate or eliminate the danger of a worst-case accidental release of hydrofluoric acid at all other commercial facilities, including the use of alternative processes or substances which provide a net benefit to public safety, human health, and the environment, and relocation of facilities to unpopulated areas.

“(q) Mickey Leland Urban Air Toxics Research Center.—

“(1) Establishment.—The Administrator shall oversee the establishment of a National Urban Air Toxics Research Center, to be located at a university, a hospital, or other facility capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics. The center shall be known as the Mickey Leland National Urban Air Toxics Research Center. The geographic site of the National Urban Air Toxics Research Center should be further directed to Harris County, Texas, in order to take full advantage of the well developed scientific community presence currently on site at the Texas Medical Center as well as the extensive data previously compiled from the comprehensive monitoring system currently in place.

“(2) Board of directors.—The National Urban Air Toxics Research Center shall be governed by a Board of Directors to be comprised of 9 members, the appointment of which shall be allocated pro rata among the Speaker of the House, the majority leader of the Senate and the President. The members of the Board of Directors shall be selected based on their respective academic and professional backgrounds and expertise in matters relating to public health, environmental pollutions, and the industrial hygiene. The duties of the Board of Directors shall be to determine policy and research guidelines, submit views from center sponsors and the public and issue periodic reports of center fundings and activities.

“(3) Scientific advisory panel.—The Board of Directors shall be advised by a Scientific Advisory Panel, the 13 members of which shall be appointed by the Board, and to include eminent members of the scientific and medical communities. The Panel membership may include scientists with relevant experience from the National Institute of Environmental Health Sciences, the Center for Disease Control, the Environmental Protection Agency, the National Cancer Institute, and others, and the Panel

shall conduct peer review and evaluate research results. The Panel shall assist the Board in developing the research agenda, reviewing proposals and applications, and advise on the awarding of research grants.

“(4) Findings.—The center shall be established and funded with both Federal and private source funds.

“(r) Oil and Gas Wells.—(1) Notwithstanding the provisions of this section, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

“(2) In the case of oil and gas wells listed under this section, in promulgating regulations under this section, the Administrator shall determine whether oil and gas wells present a risk greater than that referred to in subsection (g)(1)(A). If the Administrator determines that such wells do present a risk greater than the levels referred to in subsection (g)(1)(A) the Administrator shall promulgate standards under this section applicable to such wells.

“(s) Coke Oven Production Technology Study.—(1) The Secretary of Energy and the Administrator shall jointly undertake a 6-year study to assess coke oven production emission control technologies and to assist in the development and commercialization of technically practicable and economically viable control technologies which will have the potential to significantly reduce emissions of hazardous air pollutants from coke oven production facilities. In identifying control technologies, the Secretary and the Administrator shall consider the range of existing coke oven operations and battery design and the availability of sources of materials for such ovens as well as alternatives to existing coke oven production design.

“(2) The Secretary and the Administrator are authorized to enter into agreements with persons who propose to develop, install, and operate coke production emission control technologies which have the potential for significant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 percent of the cost of any project assisted pursuant to this subsection.

“(3) The Secretary shall prepare annual reports to Congress on the status of the research program and at the completion of the study shall make recommendations to the Administrator identifying practicable and economically viable control technologies for coke oven production facilities to reduce residual risks remaining after implementation of the standard under subsection (d) (MACT).

“(4) There are authorized to be appropriated \$5,000,000 for each of the fiscal years 1991 through 1996 to carry out the program authorized by this subsection.

“(t) Report on Costs and Benefits.—Commencing on January 1, three years after the date of the enactment of the Clean Air Act Amendments of 1990 and annually thereafter, the Government Accounting Office, in consultation with other agencies, such as the Environmental Protection Agency, the Department of Labor, the Department of Commerce, the United States Trade Representative, the National Academy of Sciences, the National Academy of Engineering, the Council on Environmental Quality, and the Surgeon General, shall provide a report to Congress on the incremental human health and environmental benefits and incremental costs associated with compliance with the provisions of the Maximum Achievable Control Technologies prescribed by the Clean Air Act Amendments of 1990. The report shall include, for each source category and subcategory for which MACT is prescribed, the effects on human life, human health, the environment, and the economy (including both positive impacts and impacts detrimental to jobs and communities resulting from loss of employers and employment, etc.), energy security impacts, the actual emissions reductions as a result of the Clean Air Act Amendments of 1990, the effect on United States products and industrial competitiveness in national and international markets and any impacts on employment in the affected areas contributed to by the emission control requirements.”.

TITLE IV—PERMITS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 401. PERMITS.

Add the following new title IV after title III:

“TITLE IV—PERMITS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 401. DEFINITIONS.

As used in this title—

“(1) Affected source.—The term ‘affected source’ shall have the meaning given such term in title V.

“(2) Major source.—The term ‘major source’ means any stationary source (or any group of stationary sources located within a contiguous area and under common control) that is either of the following:

“(A) A major source as defined in section 112.

“(B) A major stationary source as defined in section 302 or part D of title I.

“(3) Terms defined in section 112.—For sources subject to standards under section 112, the terms ‘new source’, ‘stationary source’, and ‘area source’ shall have the meaning given such terms in that section.

“(4) Terms defined in section 111.—For sources subject to standards under section 111, the terms ‘new source’, ‘modification’, ‘existing source’, and ‘stationary source’ shall have the meaning given such terms in that section.

“(5) Schedule of compliance.—The term ‘schedule of compliance’ means a schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance with an applicable implementation plan, emission standard, emission limitation or emission prohibition.

“(6) Permitting authority.—The term ‘permitting authority’ means the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this title.

“SEC. 402. PERMIT PROGRAMS.

“(a) Violations.—After the effective date of any permit program approved or promulgated under this title, it shall be unlawful for any person to violate any requirement of a permit issued under this title, or to operate an affected source (as provided in title V), a major source, any other source (including an area source) subject to standards or regulations under sections 111 or 112, any source required to have a permit under parts C or D, or any other stationary source designated by regulations promulgated by the Administrator, except in compliance with a permit issued by a permitting authority under this title. Nothing in this subsection shall be construed to alter the requirements of section 165, 172, and 173 regarding the requirement that a permit be obtained before construction. The Administrator may, in the Administrator's discretion, promulgate regulations to exempt one or more source categories from the requirements of this subsection if the Administrator finds that such an exemption would be consistent with the purposes of this Act.

“(b) Regulations.—The Administrator shall promulgate within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990 regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These elements shall include each of the following:

“(1) Requirements for permit applications, including a standard application form and criteria for determining in a timely fashion the completeness of applications.

“(2) Monitoring and reporting requirements.

“(3)(A) A requirement under State law that the owner or operator of all sources subject to the requirement to obtain a permit under this title pay an annual fee, or the equivalent over some other period, sufficient to cover all reasonable costs of developing and administering the permit program, including the reasonable costs of—

“(i) reviewing and acting upon any application for such a permit,

“(ii) if the owner or operator receives a permit for such source, whether before or after the date of the enactment of the Clean Air Act Amendments of 1990, implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

“(iii) emissions and ambient monitoring,

“(iv) preparing generally applicable regulations, or guidance,

“(v) modeling, analyses, and demonstrations, and

“(vi) preparing inventories and tracking emissions.

“(B) The total amount of fees collected by the permitting authority shall conform to the following requirements:

“(i) The Administrator shall not approve a program as meeting the requirements of this paragraph unless the State demonstrates that, except as otherwise provided in subparagraphs (ii) through (v) of this subparagraph, the program will result in the collection, in the aggregate, from all sources subject to subparagraph (A), of an amount not less than \$25 per ton of each regulated pollutant, or such other amount as the Administrator may determine adequately reflects the reasonable costs of the permit program.

“(ii) As used in this subparagraph, the term ‘regulated pollutant’ shall mean (I) a volatile organic compound; (II) each pollutant regulated under section 111 or 112; and (III) each pollutant for which a national primary ambient air quality standard has been promulgated (except that carbon monoxide shall be excluded from this reference).

“(iii) In determining the amount under clause (i), the permitting authority is not required to include any amount of regulated pollutant emitted by any source in excess of 4,000 tons per year of that regulated pollutant.

“(iv) The requirements of clause (i) shall not apply if the permitting authority demonstrates that collecting an amount less than the amount specified under clause (i) will meet the requirements of subparagraph (A).

“(v) The fee calculated under clause (i) shall be increased (consistent with the need to cover reasonable costs) in each year beginning after the year of enactment of the Clean Air Act Amendments of 1990 by the percentage, if any, by which the Consumer Price Index for the most recent calendar year ending before the beginning of such year exceeds the Consumer Price Index for the calendar year 1989. For purposes of this clause—

“(I) the Consumer Price Index for any calendar year is the average of the Consumer Price Index for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year, and

“(II) the revision of the Consumer Price Index which is most consistent with the Consumer Price Index for calendar year 1989 shall be used.

“(C)(i) If the Administrator determines, under subsection (d), that the fee provisions of the operating permit program do not meet the requirements of this paragraph, or if the Administrator makes a determination, under subsection (i), that the permitting authority is not adequately administering or enforcing an approved fee program, the Administrator may, in addition to taking any other action authorized under this title, collect reasonable fees from the sources identified under subparagraph (A) without regard to the requirements of subparagraph (B).

“(ii) Any source that fails to pay fees lawfully imposed by the Administrator under this subparagraph shall pay a penalty of 50 percent of the fee amount, plus interest on the fee amount computed in accordance with section 6621(a)(2) of the Internal Revenue Code of 1986 (relating to computation of interest on underpayment of Federal taxes).

“(iii) Any fees, penalties, and interest collected under this subparagraph shall be deposited in a special fund in the United States Treasury for licensing and other services, which thereafter shall be available for appropriation, to remain available until expended, subject to appropriation, to carry out the Agency's activities for which the fees were collected. Any fee required to be collected by a State or interstate agency under this subsection shall be utilized solely to support the air pollution control permit program of such State or interstate agency as provided in this paragraph.

“(4) Requirements for adequate personnel and funding to administer the program.

“(5) A requirement that the permitting authority have adequate authority to:

“(A) issue permits and assure compliance by all sources required to have a permit under this title with each applicable standard, regulation or requirement under this Act;

“(B) issue permits for a fixed term, not to exceed 5 years;

“(C) assure that upon issuance or renewal permits incorporate emission limitations and other requirements in an applicable implementation plan;

“(D) terminate, modify, or revoke and reissue permits for cause; and

“(E) enforce permits, permit fee requirements, and the requirement to obtain a permit, including authority to recover civil penalties in an amount not less than \$10,000 per day for each violation, and appropriate criminal penalties.

“(6) Adequate, streamlined, and reasonable procedures for expeditiously determining when applications are complete and for processing such applications for public notice, including offering an opportunity for public comment and a hearing, and for expeditious review of permit actions, including applications.

“(7) Authority to make available to the public any permit application, compliance plan, permit, and monitoring or compliance report under section 403(e), subject to the provisions of section 114(c) of this Act.

“(c) Single Permit.—A single permit may be issued for a facility with multiple sources.

“(d) Submission and Approval.—Not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Governor of each State shall develop and submit to the Administrator a permit program under State law or

under an interstate compact meeting the requirements of this title. In addition, the Governor shall submit a legal opinion from the attorney general (or the attorney for those State air pollution control agencies that have independent legal counsel), or from the chief legal officer of an interstate agency, that the laws of the State, locality, or the interstate compact provide adequate authority to carry out the program. Not later than 1 year after receiving a program, and after notice and opportunity for public comment, the Administrator shall approve or disapprove such program, in whole or in part. The Administrator may approve a program to the extent that the program meets the requirements of this Act, including the regulations issued under subsection (b). If the program is disapproved, in whole or in part, the Administrator shall notify the Governor of any revisions or modifications necessary to obtain approval. The Governor shall revise and resubmit the program for review under this section within 180 days after receiving notification. If the Governor fails within such period to resubmit an approvable program, the Administrator—

“(1) shall, to the extent the permit program would implement an applicable implementation plan, withhold final action on plan revisions affecting one, or a small group of, major sources; and

“(2) may in the Administrator's discretion take either or both of the following actions:

“(A) apply any of the sanctions specified in section 179(b) of this Act other than the sanction specified in section 179(b)(2); or

“(B) promulgate a program, or partial program, under this title.

“(e) Suspension.—The Administrator shall suspend the issuance of permits promptly upon publication of notice of approval of a permit program under this section, but may, in such notice, retain jurisdiction over permits that have been federally issued, but for which the administrative or judicial review process is not complete. The Administrator shall continue to administer and enforce federally issued permits under this title until they are replaced by a permit issued by a permitting program. Nothing in this subsection should be construed to limit the Administrator's ability to enforce permits issued by a State.

“(f) Partial Permit Program.—The Governor of a State may submit, and the Administrator may approve, a partial permit program. No partial permit program shall be approved unless, at a minimum, it applies, and ensures compliance with, this title and each of the following:

“(1) All requirements established under title V applicable to ‘affected sources’.

“(2) All requirements established under section 112 applicable to ‘major sources’, ‘area sources,’ and ‘new sources’.

“(3) All requirements of title I (other than section 112) applicable to sources required to have a permit under this title.

Approval of a partial program shall not relieve the State of its obligation to submit a complete program, nor from the application of any sanctions under this Act for failure to submit an approvable permit program.

“(g) Interim Approval.—If a program (including a partial permit program) submitted under this title substantially meets the requirements of this title, but is not fully approvable, the Administrator may by rule grant the program interim approval. In the notice of final rulemaking, the Administrator shall specify the changes that must be made before the program can receive full approval. An interim approval under this subsection shall expire on a date set by the Administrator not later than 2 years after such approval, and may not be renewed.

“(h) Effective Date.—The effective date of a permit program, or partial or interim program, approved under this title, shall be the effective date of approval by the Administrator.

“(i) Administration and Enforcement.—Whenever the Administrator makes a preliminary determination that a permitting authority is not adequately administering and enforcing a program, or portion thereof, in accordance with the requirements of this title, the Administrator shall notify the permitting authority of such determination and the reasons therefor. Such notice shall be made public. If the permitting authority fails to take action to assure adequate administration and enforcement, the Administrator may in the Administrator's discretion, but not before 90 days after issuing such notice, take one or more of the following actions—

“(1) withdraw approval of the program or portion by rule;

“(2) propose to apply any of the sanctions specified in section 179(b) of this Act other than the sanction specified in section 179(b)(2); or

“(3) promulgate a program, or portion of a program, under this title.

“SEC. 403. PERMIT APPLICATIONS.

“(a) Applicable Date.—Any source specified in section 402(a) shall become subject to a permit program, and required to have a permit, on the later of the following dates—

“(1) the effective date of a permit program or partial or interim permit program applicable to the source; or

“(2) the date such source becomes subject to section 402(a).

“(b) Compliance Plan.—(1) The regulations required by section 402(b)(1) shall include a requirement that there is submitted with the permit application a compliance plan describing how the source will comply with all applicable requirements under this Act. The compliance plan shall include a schedule of compliance, and a schedule under which the permittee will submit progress reports to the permitting authority no less frequently than every 6 months.

“(2) The regulations shall further require the permittee to periodically certify that the facility is in compliance with any applicable requirements of the permit, and to promptly report, consistent with provisions of the United States Constitution regarding self-incrimination, any violations of such requirements to the permitting authority.

“(c) Deadline.—Any person required to have a permit shall, not later than 12 months after the date on which the source becomes subject to a permit program approved or promulgated under this title, or such earlier date as the permitting authority may establish, submit to the permitting authority a compliance plan and an application for a permit signed by a responsible corporate official, who shall certify the accuracy of the information submitted.

“(d) Timely and Complete Applications.—Except for sources required to have a permit before construction under sections 165, 172, or 173, if an applicant has submitted a timely and complete application for a permit required by this title, but final action has not been taken on such application, the source's failure to have a permit shall not be a violation of this Act, unless the delay in final action was due to the failure of the applicant timely to submit information required or requested to process the application. No source required to have a permit under this title shall be in violation of section 402(a) before the date on which the source is required to submit an application under subsection (c).

“(e) Copies; Availability.—A copy of each permit application, compliance plan, emissions or compliance monitoring report, certification, and each permit issued under this title, shall be available to the public. If an applicant or permittee is required to submit information entitled to protection from disclosure under section 114(c) of this Act, the applicant or permittee may submit such information separately. The requirements of section 114(c) shall apply to such information. The contents of a permit shall not be entitled to protection under section 114(c).

“SEC. 404. PERMIT REQUIREMENTS AND CONDITIONS.

“(a) Conditions.—Each permit issued under this title shall include emission limitations and standards, a schedule of compliance, and such other conditions as are necessary to assure compliance with applicable requirements.

“(b) Monitoring and Analysis.—The Administrator may by rule prescribe procedures and methods for determining compliance and for monitoring and analysis of pollutants regulated under this Act.

“(c) Inspection Entry, Monitoring Certification and Reporting.—Each permit issued under this title shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions. Such monitoring and reporting requirements shall conform to any applicable regulation under subsection (b). Any report required to be submitted by a permit issued to a corporation under this title shall be signed by a responsible corporate official, who shall certify its accuracy.

“(d) General Permits.—The permitting authority may, after notice and opportunity for public hearing, issue a general permit covering numerous similar sources. Any general permit shall comply with all requirements applicable to permits under this title. No source covered by a general permit shall thereby be relieved from the obligation to file an application under section 403.

“(e) Temporary Sources.—The permitting authority may issue a single permit authorizing emissions from similar operations at multiple temporary locations. No such permit shall be issued unless it includes conditions that will assure compliance with all the requirements of this Act at all authorized locations, including ambient standards and compliance with any applicable increment or visibility requirements under part C of title I. Any such permit shall in addition require the owner or operator to notify the permitting authority in advance of each change in location. The permitting authority may require a separate permit fee for operations at each location.

“(f) No Less Stringent Requirement.—(1) A permit may not be reissued or modified to contain emission limitations or other requirements that are less stringent than the comparable emission limitations or requirements in the previous permit or that applied to the source under an applicable implementation plan.

“(2) Notwithstanding paragraph (1) of this subsection, a permit may be reissued or modified, in accordance with section 405 of this title, to contain a less stringent emission limitation or other requirement (other than standards established under section 111 or 112) if the applicant shows that the revised emission limitation or requirement is consistent with any demonstration of attainment and any progress requirement in an approved implementation plan, the requirements of part C or section 173 of the Act, and will not otherwise interfere with attainment of the ambient air quality standards, progress requirements, and any other requirements of this Act and that—

“(A) the increased emissions authorized by the permit are compensated for by emissions reductions from another permitted facility, as determined under rules prescribed by the Administrator;

“(B) material and substantial alterations or additions to the permitted source occurred after permit issuance;

“(C) information is available that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and that, if known, would have justified the application of a less stringent emission limitation or requirement at that time;

“(D) technical mistakes or mistaken interpretations of law were made in issuing the permit; or

“(E) the permittee demonstrates, in accordance with procedures prescribed by the Administrator, that it has installed the controls required to meet the emission limitations and requirements in the permit and has properly constructed and tested the facility, but has nevertheless been unable to achieve the emission limitations specified in the permit, in which case the limitations in the revised, reissued, or modified permit may reflect the level of emission control actually achieved.

“(3) No permit may be reissued to contain emission standards less stringent than those established under sections 111 or 112 and applicable to the source unless the applicable standard has been revised, or, for a standard under section 112, an alternative emission limitation has been established under section 112(g).

“(g) Compliance.—Compliance with a permit issued under this title shall be deemed compliance with section 402. Except as otherwise provided by the Administrator by rule, the permit may also provide that compliance with the permit shall be deemed compliance with other applicable provisions of this Act. The preceding sentence shall not apply in the case of a standard issued under section 112(f). Compliance with a permit issued under a partial program under section 402(f) shall be deemed compliance only with those requirements for which the program was approved.

“SEC. 405. NOTIFICATION TO ADMINISTRATOR AND CONTIGUOUS STATES.

“(a) Transmission and Notice.—(1) Each permitting authority shall transmit to the Administrator a copy of each permit application, including any compliance plan and any application for alternative emission limitations under section 112(g), or for a permit modification, submitted under this title, and shall provide notice, in accordance with regulations promulgated by the Administrator, of every action related to the consideration of the application, including each permit proposed to be issued by the authority.

“(2) The permitting authority shall notify all States contiguous to the State in which the emission originates of each permit application, and each draft permit or proposed permit forwarded to the Administrator under this section, and shall provide an opportunity for such States to submit written recommendations respecting the issuance of the permit and its terms and conditions. If any part of those recommendations are not accepted by the permitting authority, such authority shall notify the State submitting the recommendations and the Administrator in writing of its failure to accept those recommendations and the reasons therefor.

“(b) Objection by EPA.—The permitting authority shall respond in writing if the Administrator (1) within 45 days after receipt of the proposed permit under subsection (a)(1), or (2) within 45 days after receiving notification under subsection (a)(2), objects in writing to its issuance as not in compliance with the requirements of this Act, including the requirements of section 110(a)(2)(D). With the objection, the Administrator shall provide a statement of the reasons for the objection. A copy of the objection and statement shall be provided to the applicant.

“(c) Issuance or Denial.—If the permitting authority fails within 90 days after the date of an objection under subsection (b), to submit a permit revised to meet the objection, the Administrator shall issue or deny the permit in accordance with the requirements of this title. No objection shall be subject to judicial review until the Administrator takes final action to issue or deny a permit under this subsection.

“(d) Waiver of Notification Requirement.—(1) The Administrator may waive the requirements of subsections (a) and (b) at the time of approval of a permit program under this title for any category (including any class, type, or size within such category) of sources covered by the program.

“(2) The Administrator may, by regulation, establish categories of sources (including any class, type, or size within such category) to which the requirements of subsections (a) and (b) shall not apply.

“(3) The Administrator may exclude from any waiver under this subsection notification under paragraph (a)(2). Any waiver granted under this subsection may be revoked or modified by the Administrator by rule.

“(e) Refusal of Permitting Authority To Terminate, Modify, or Revoke and Reissue.—If the Administrator finds that cause exists under section 402(b)(5)(D) to terminate, modify, or revoke and reissue a State permit under this title, the Administrator shall notify the permitting authority and the source of the Administrator's finding. The permitting authority shall, within 90 days after receipt of such notification, forward to the Administrator under this section a proposed determination of termination, modification, or revocation and reissuance, as appropriate. The Administrator may extend such 90 day period for an additional 90 days if the Administrator finds that a new or revised permit application is necessary, or that the permitting authority must require the permittee to submit additional information. The Administrator may review such proposed determination under the provisions of subsections (a) and (b). If the permitting authority fails to submit the required proposed determination, or if the Administrator objects and the permitting authority fails to resolve the objection within 90 days, the Administrator may, after notice and in accordance with fair and reasonable procedures, terminate, modify, or revoke and reissue the permit.

“SEC. 406. OTHER AUTHORITIES.

“(a) State or Interstate Authorities.—Nothing in this title shall prevent a State, or interstate permitting authority, from establishing additional permitting requirements not inconsistent with this Act.

“(b) Acid Deposition Program.—Nothing in this title shall be construed to authorize the Administrator, or a State, to modify or revoke any allowance granted under title V.

“SEC. 407. SMALL SOURCE TECHNICAL AND ENVIRONMENTAL COMPLIANCE ASSISTANCE PROGRAM.

“(a) Plan Revisions.—Consistent with sections 110 and 112, each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator as part of the State implementation plan for such State or as a revision to such State implementation plan under this section, plans for establishing a small source technical and environmental compliance assistance program. Such submission shall be made within 24 months after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall approve such program if it includes each of the following:

“(1) Adequate mechanisms for developing, collecting, evaluating, and coordinating information concerning compliance methods and technologies for small sources.

“(2) Adequate mechanisms for advising small sources on pollution prevention, including providing information concerning alternative technologies, process changes, products, and methods of operation that help reduce air pollution.

“(3) A designated State office within the relevant State agency to serve as ombudsman for small sources in connection with the implementation of this Act.

“(4) A program for permits that meets the requirements of subsection (c).

“(5) Adequate mechanisms to assure that small sources receive notice of their rights under this Act in such manner and form as to assure reasonably adequate time for such sources to evaluate compliance methods and any relevant or applicable proposed or final regulation or standard issued under this Act.

“(b) Program.—The Administrator shall establish within 9 months after the date of the date of the enactment of the Clean Air Act Amendments of 1990 a small source technical assistance program. Such program shall—

“(1) assist the States in the development of the program required under subsection (a) and section 112(o) (relating to technical assistance for small sources);

“(2) issue technical guidance for the use of the States in the implementation of these programs that includes alternative control technologies and pollution prevention methods applicable to small sources; and

“(3) provide for implementation of the program required under subsection (c) in any State that fails to submit an applicable program under that paragraph.

“(c) State Permit Program.—The State shall establish a permit program for small sources located within a nonattainment area, ozone transport area, or subject to a standard under section 112 consistent with the other provisions of this title. Such program shall provide that—

“(1) a small source shall have the option of obtaining an individual permit under this subsection as a substitute for any general permit issued under this title;

“(2) such individual permit shall be developed after consultation with the small source or with duly authorized representatives of the small sources;

“(3) individual permits issued under this subsection to small sources shall require compliance with applicable standards, regulations, or requirements under this Act, including emission limitations, pollution control measures, and recordkeeping and reporting requirements under this Act, except that methods of and time for compliance with any such standard or requirement may be modified for a small source in such permit based on the technical and financial capability of the small source or group of sources and the availability of less burdensome alternatives, and, in particular, pollution prevention measures; any such modifications shall achieve equivalent emission reductions consistent with the public health, welfare, and environmental protection goals and deadlines of this Act;

“(4) any individual permit issued to a small source under this subsection shall be issued in accordance with the procedures of this title, and shall be subject to review by the Administrator, as provided in this title;

“(5) the State (or the Administrator) may reduce any fee required under this Act to take into account the financial resources of a small source; and

“(6) requirements for continuous emission monitoring will not be imposed on a small source (or sources) unless the State (or the Administrator) has determined that such requirements are necessary and appropriate.

“(d) Eligibility.—For purposes of this section, eligibility for participation in the program under this subsection shall be limited to small sources (as defined in this Act) which are small businesses (as defined in the Small Business Act). The Administrator, in consultation with the Administrator of the Small Business Administration and after providing notice and opportunity for public comment, may exclude from coverage any category or subcategory of sources that the Small Business Administrator determines to have sufficient technical and financial capabilities to meet the requirements of this Act without the application of this subsection.

“(e) Monitoring.—The Administrator shall direct the Agency's Office of Small and Disadvantaged Business Utilization through the Small Business Ombudsman (hereinafter in this section referred to as the ‘Ombudsman’) to monitor the Small Business Environmental Compliance Assistance Program under this subsection. In carrying out such monitoring activities, the Ombudsman shall—

“(1) render advisory opinions on the overall effectiveness of the Small Source Technical and Environmental Compliance Assistance Program, difficulties encountered, and degree and severity of enforcement;

“(2) make periodic reports to the Congress on the compliance of the Small Source Technical and Environmental Compliance Assistance Program with the requirements of the Paperwork Reduction Act, the Regulatory Flexibility Act, and the Equal Access to Justice Act;

“(3) review information to be issued by the Small Source Technical and Environmental Compliance Assistance Program for small business stationary sources to ensure that the information is understandable by the layperson; and

“(4) have the Small Source Technical and Environmental Compliance Assistance Program serve as the secretariat for the development and dissemination of such reports and advisory opinions.

“(f) Compliance Advisory Panel.—(1) There shall be created a Compliance Advisory Panel (hereinafter referred to as the ‘Panel’) on the State level of not less than 7 small business owners. This Panel shall—

“(A) render advisory opinions concerning the effectiveness of the Small Source Technical and Compliance Assistance Program, difficulties encountered, and degree and severity of enforcement;

“(B) make periodic reports to the Administrator concerning the compliance of the State Small Source Technical and Environmental Compliance Assistance Program with the requirements of the Paperwork Reduction Act, the Regulatory Flexibility Act, and the Equal Access to Justice Act;

“(C) review information for small stationary sources to assure such information is understandable by the layperson; and

“(D) have the Small Source Technical and Environmental Compliance Assistance Program serve as the secretariat for the development and dissemination of such reports and advisory opinions.

“(2) The Panel shall consist of—

“(A) 2 members selected by the Governor;

“(B) 2 members selected by the State legislature (1 member each by the majority and minority leadership of the lower house, or in the case of a unicameral State legislature, 2 members each shall be selected by the majority leadership and the minority leadership, respectively, of such legislature, and subparagraph (C) shall not apply);

“(C) 2 members selected by the State legislature (1 member each by the majority and minority leadership of the upper house, or the equivalent State entity); and

“(D) 1 member selected by the head of the department or agency of the State responsible for air pollution permit programs.”.

TITLE V—ACID DEPOSITION CONTROL

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 501. ACID DEPOSITION CONTROL.

Add the following new title after title IV:

“TITLE V—ACID DEPOSITION CONTROL

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“SEC. 501. FINDINGS AND PURPOSES.

“(a) Findings.—The Congress finds that—

“(1) the presence of acidic compounds and their precursors in the atmosphere and in deposition from the atmosphere represents a threat to natural resources, ecosystems, materials, visibility, and public health;

“(2) the principal sources of the acidic compounds and their precursors in the atmosphere are emissions of sulfur and nitrogen oxides from the combustion of fossil fuels and other industrial processes;

“(3) the problem of acid deposition is of national and international significance and cannot be addressed adequately without effective State-Federal and international cooperation;

“(4) strategies and technologies for the control of precursors to acid deposition exist now that are economically feasible, and improved methods are expected to become increasingly available over the next decade;

“(5) current and future generations of Americans will be adversely affected by delaying measures to remedy the problem;

“(6) reduction of total atmospheric loading of sulfur dioxide and nitrogen oxides will enhance protection of the public health and welfare and the environment;

“(7) control measures to reduce acid deposition precursor emissions from steam-electric generating units should be initiated without delay.

“(b) Purposes.—The purpose of this title is to reduce the adverse effects of acid deposition through reductions in annual emissions of sulfur dioxide of approximately 10,000,000 tons from 1980 emission levels, and reductions in annual emissions of oxides of nitrogen of approximately 2,500,000 tons relative to their levels in the year 2000, in the 48 contiguous States and the District of Columbia, while providing for the continued use of all fossil fuels for electric generation and ensuring electric reliability. It is also the purpose of this title to encourage energy conservation and the use of renewable resources and to encourage pollution prevention as a long range strategy, consistent with the provisions of this title, for reducing air pollution and other adverse impacts of energy production and use and, to the greatest extent possible, to prevent or mitigate potential losses or shifts in employment and other socioeconomic impacts caused by such reductions and prevention.

“(c) Coverage.—This title shall apply only in the 48 contiguous States and the District of Columbia.

“SEC. 502. DEFINITIONS; DATA.

“(a) Definitions.—As used in this title—

“(1) Affected source.—The term ‘affected source’ means a source that includes one or more affected units.

“(2) Unit.—The term ‘unit’ means a fossil fuel-fired steam production device such as a boiler or furnace used to combust fuel to produce steam.

“(3) Affected unit.—The term ‘affected unit’ means a unit for which annual allowances are allocated under this title.

“(4) Electric utility steam generating unit.—The term ‘electric utility steam generating unit’ has the meaning provided by section 112(a)(4), except that such term does not include any qualifying small power production facility or qualifying cogeneration facility (within the meaning of section 3(17)(C) or 3(18)(B) of the Federal Power Act) (A) that sells power pursuant to a long-term contract to supply electricity executed on or before December 31, 1989, or (B) with respect to which a State regulatory authority issued an order on or before December 31, 1989, directing the purchasing utility to execute such a contract with such a facility.

“(5) Existing electric utility steam generating unit.—The term ‘existing electric utility steam generating unit’ means an electric utility steam generating unit that commenced commercial operation before the date of the enactment of the Clean Air Act Amendments of 1990. Any such unit which is modified, reconstructed or repowered after such date shall continue to be an existing electric utility steam generating unit for purposes of this title.

“(6) New electric utility steam generating unit.—The term ‘new electric utility steam generating unit’ means any electric utility steam generating unit which is not an existing electric utility steam generating unit.

“(7) Allowance.—The term ‘allowance’ means an authorization, as described in section 503(f), issued by the Administrator under this title, to emit, during any single calendar year, a ton of sulfur dioxide (or nitrogen oxides in the case of nitrogen oxide allowances issued under section 509).

“(8) Baseline.—Except as otherwise provided in this title, the term ‘baseline’ means the annual quantity of fossil fuel consumed, measured in millions of British thermal units (‘mmBtu’), calculated as follows:

“(A) For each electric utility steam generating unit in commercial operation before January 1, 1985, the baseline shall be the average annual quantity of fuel (in mmBtu) consumed during calendar years 1985, 1986, and 1987, as recorded pursuant to Department of Energy Form 767. For any unit for which these forms were not filed, the baseline shall be the annual fuel consumption level specified for that unit in the 1985 National Acid Precipitation Assessment Program (NAPAP) Emissions Inventory, Version 2 (including where applicable, the National Utility Reference File (NURF)). The Administrator shall exclude periods during which a unit is shut down for a continuous period of 4 months or longer, and make appropriate adjustments under this paragraph. Upon petition of the owner or operator of any unit, the Administrator may make appropriate baseline adjustments for accidents that caused prolonged outages.

“(B) For each existing electric utility steam generating unit that commenced commercial operation on or after January 1, 1985, the baseline shall be the unit's average annual fuel consumption (in mmBtu) at a 65 percent capacity factor, except that upon petition of the owner or operator, the Administrator may establish as the baseline for any such unit—

“(i) the annual average fuel consumption (in mmBtu) for the first 3 full consecutive calendar years beginning after the unit commenced commercial operation, or

“(ii) if it is not feasible to use such 3-calendar year period, the unit's annual average fuel consumption (in mmBtu) for a representative calendar year after 1985, as calculated pursuant to a method which the Administrator shall, by regulation, prescribe.

“(C) For any other unit, the baseline shall be the average annual quantity of fuel consumed (in mmBtu) by that unit, as established by the Administrator by rule.

“(9) Compliance plan.—The term ‘compliance plan’ means the compliance plan required under title IV.

“(10) Continuous emission monitoring system.—The terms ‘continuous emission monitoring system’ and ‘CEMS’ mean the equipment used to sample, measure, analyze, and provide, on a continuous basis, a permanent record of emissions and flow (expressed in pounds per million British thermal units (lbs./mmBtu), pounds per hour (lbs./hr.)), or such other items as the Administrator may, by rule, prescribe under section 511(a).

“(11) First and second phase.—The term ‘First Phase’ means the period after December 31, 1995, and before January 1, 2001, and the term ‘Second Phase’ means the period beginning January 1, 2001.

“(12) Permitting authority.—The term ‘permitting authority’ has the meaning given that term in title IV.

“(13) Clean coal technology.—The term ‘clean coal technology’ means any technology, including any technology applied at the precombustion, combustion, or postcombustion stage, at a new or existing electric utility steam generating unit which will achieve significant reductions in air emissions of any pollutant or pollutants associated with the utilization of coal in the generation of electricity, process steam, or industrial products, which is not in widespread use as of the date of the enactment of the Clean Air Act Amendments of 1990.

“(14) Repowering.—The term ‘repowering’ means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or a derivative of one or more of these technologies, or any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and of achieving significantly greater waste reduction relative to the performance of technology in widespread commercial use as of the date of the enactment of the Clean Air Act Amendments of 1990, as determined by the Administrator, in consultation with the Secretary of Energy.

“(15) State.—The term ‘State’ means one of the 48 contiguous States or the District of Columbia.

“(16) Actual 1985 emission rate.—For any unit, the term ‘actual 1985 emission rate’ means the lesser of the rate described in subparagraph (A) or (B), expressed in lbs./mmBtu—

“(A) The unit's average emission rate for sulfur dioxide or oxides of nitrogen for the calendar year 1985 as reported in the National Acid Precipitation Assessment Program (NAPAP) Emissions Inventory, Version 2 (National Utility Reference File (NURF), if applicable).

“(B) The emission rate (if any) applicable to the unit under the applicable implementation plan for the calendar year 1985, based on documentation in existence before January 1, 1990.

In the case of an existing unit that was not in commercial operation in calendar year 1985, the term ‘actual 1985 emissions rate’ means the unit's emissions rate for a representative calendar year after 1985, as determined by the Administrator. The Administrator shall select the representative calendar year to be used for such purposes within 1 year after the enactment of the Clean Air Act Amendments of 1990.

“(b) Correction of Data.—The Administrator shall, upon application or on the Administrator's own motion, by December 31, 1991, correct any factual errors in data from which affected Second Phase units' baselines or actual 1985 emission rates have been calculated. Corrected data shall be used for purposes of issuing allowances under this title. The failure of the Administrator to correct any alleged factual error in such reports shall not be subject to judicial review.

“SEC. 503. ALLOWANCE PROGRAM.

“(a) Allocation of Annual Allowances for Existing Units.—The Administrator shall allocate annual allowances to the owner or operator of the affected units at an affected source in the annual amounts calculated under this title. First Phase allowances may not be allocated or issued for the Second Phase. Nothing in the preceding sentence shall be construed to prohibit the banking of unused First Phase allowances to be carried forward and added to allowances allocated in subsequent years, including years in the Second Phase. Except as provided in section 508(d) and 509, the removal of an existing affected

unit or source from commercial operation at any time after the date of the enactment of the Clean Air Act Amendments of 1990 (whether before or after commencement of the First Phase or Second Phase) shall not terminate or otherwise affect the allocation of allowances for the First Phase or for the Second Phase to which the unit is entitled. Allowances shall be allocated and issued by the Administrator without cost to the recipient.

“(b) EPA Allowance System Regulations.—

“(1) In general.—(A) Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate such regulations under this section as may be necessary to implement the allowance system established under this section.

“(B) The regulations under this section shall ensure that (i) allowances are issued and allocated in a timely manner, (ii) the allowance system functions effectively, efficiently, and competitively and without discrimination, (iii) allowances are reasonably transferable temporarily or permanently by purchase, lease, or otherwise, and (iv) allowances are not used to impede access to, or competition for, electric energy in any market.

“(C) The regulations under this section shall otherwise protect the integrity and value of such allowances and of the allowance system from fraud or misuse.

“(D) The regulations under this section shall be consistent with requirements for electric utility reliability, including central dispatch and the need to meet or cope with emergencies of any kind, and shall govern the issuance, transfer, holding, use, and banking of all allowances.

“(E) The regulations under this section shall provide that the allowances issued under this title may be transferred among the owners or operators of affected sources and other persons, including a multistate electric utility and new independent power producer units. Such regulations shall permit the transfer of the right to receive allowances prior to the issuance of such allowances. Such regulations shall permit transfers, including transfers by auction or through the mechanism of a reserve, only within each of the 2 major geographic regions of the country as defined by the Administrator in such regulations, except as provided in subsection (e) in the case of new units, and except that an owner or operator, as of the date of enactment of the Clean Air Act Amendments of 1990, of 2 or more affected units may transfer allowances among such units, irrespective of regional boundaries.

“(2) Review and revision.—The Administrator shall review the allowance program established under this section, and the regulations implementing such program, at intervals of at least every 4 years after promulgation of such regulations and shall make the results of such review public. Based on such review, the Administrator shall amend such regulations to the extent necessary, consistent with the purposes and provisions of this title.

“(3) Consultation.—In the development and promulgation of regulations under this section and in the administration of the allowance program established under this section, the Administrator shall consult with, and utilize the expertise of, the Secretary of Energy and the Federal Energy Regulatory Commission. In the case of State regulated electric utilities, the Administrator shall also consult with, and obtain the advice of, the applicable electric utility ratemaking authority of the State. The Administrator shall also consult with, and obtain the advice of, representatives of regulated and nonregulated electric utilities. The Administrator shall also consult with the interested public. The Administrator shall particularly consult with the Commission and such ratemaking authorities concerning issues of operation and ownership of affected units under applicable laws, tariffs, regulations, and contractual arrangements to ensure that the allowances are properly issued and recorded and that the allowance system functions as provided by paragraph (1).

“(4) Multiple ownership.—(A) The Administrator shall include in the regulations under this section requirements under this paragraph regarding the issuance of allowances for an affected unit where the affected unit is owned by more than one person.

Such regulations shall require that, unless the owners of the unit otherwise provide by contract, allowances for the affected unit shall be issued to each person owning a share in the unit in proportion to the ownership shares.

“(B) The regulations under this paragraph shall also require that, unless the owners of the unit otherwise provide by contract, whenever any owner is required by contract to contribute to the costs of control of emissions at the unit and the level of emissions control at such unit makes allowances issued to such unit available for transfer, the owners required to contribute to such costs of control shall share such transferable allowances in proportion to each owner's contribution to such costs.

“(C) The regulations under this paragraph shall also provide, for the purpose of this section, that—

“(i) the term ‘owner’ shall include the holder of a leasehold interest in an affected unit or any part thereof and shall not include a passive lessor, or a person who has an equitable interest through such passive lessor, whose rental payments are not based directly or indirectly upon the revenues or income from the affected unit; and

“(ii) where a utility purchases power from an affected unit under a life-of-the-unit, firm power contractual arrangement, such utility shall be considered an owner in proportion to its contractual share.

For the purposes of clause (ii) of this subparagraph, the term ‘life-of-the-unit, firm power contractual arrangement’ means a contractual arrangement under which a utility receives a specified amount or percentage of capacity and associated energy generated by a specified generating unit (or units) and pays its proportional amount of such unit's total costs for the life of the unit.

“(c) Interpollutant Trading.—The regulations under subsection (b) shall provide, subject to any applicable restrictions pursuant to section 520, for trading and banking of allowances for sulfur dioxide and oxides of nitrogen, including the establishment of a baseline under section 509 for emissions of oxides of nitrogen. Such regulations shall provide that, for trading purposes, 1.5 pounds of oxides of nitrogen shall be equivalent to 1.0 pound of sulfur dioxide. Interpollutant trades of allowances for use in areas failing to meet the applicable national primary ambient air quality standard for ozone, nitrogen dioxide, sulfur dioxide, or PM-10 shall be subject to approval by the Administrator in accordance with such regulations.

“(d) Allowance Tracking System.—(1) The Administrator shall establish a system for issuing, recording, and tracking allowances under this title, and shall specify by regulation, promulgated as provided in subsection (b), the procedures and requirements for that system.

“(2) All allowance allocations and transfers shall, upon recordation by the Administrator, be deemed a part of each unit's permit for purposes of section 507.

“(3) The Administrator shall take such steps as may be necessary to ensure that allowance transfers are recorded within 14 working days after receipt of a properly certified notice of such transfer and that persons receiving or transferring allowances file accurate annual reports regarding such transactions and that persons holding allowances during any year file accurate annual reports regarding the number of such allowances held. Transfers of allowances shall not be effective until written certification of the transfer on a proper form (signed by a responsible official of each party to the transfer) is received and recorded by the Administrator. All such transfers shall be consistent with the purposes and requirements of this title and shall not result in emissions of sulfur dioxide (or, if applicable, nitrogen oxides) in any year in excess of the total number of allowances authorizing such emissions in that year, including allowances carried forward from previous years.

“(4) In order to insure electric reliability, such regulations shall not prohibit or affect temporary increases and decreases in emissions within utility systems or power pools that result from their operations, including emergencies and central dispatch, and such temporary emissions increases and decreases shall not require transfer of allowances among units nor shall it require recordation. Notwithstanding the preceding sentence, the total tonnage of emissions in any calendar year (calculated at the

end thereof) from each unit involved shall not exceed the allowances allocated to the unit for the calendar year concerned and issued to the owner or operator of the unit for that year, plus or minus allowances transferred to or from the unit for such calendar year or carried forward to that year from prior years.

“(5) Regulations under this section shall provide, consistent with the purposes of this title, for the identification of unused allowances and for such unused allowances to be carried forward and added to allowances allocated in subsequent years.

“(6) No allowance allocated to any unit for a subsequent year may be carried backward and added to allowances in an earlier year.

“(7) The provisions of section 1001 of title 18 of the United States Codeshall apply to reports under this section and to the recordation of allowance transactions and holdings under this section.

“(e) New Electric Utility Steam Generating Units.—In the Second Phase, the owner or operator of each new electric utility steam generating unit must hold allowances equal to the annual tonnage of sulfur dioxide emitted by the unit. Notwithstanding the geographic limitations referred to in subsection (b), such new units may obtain allowances from any person, consistent with the regulations issued under this section.

“(f) Nature of Allowances.—An allowance issued under this title is a limited authorization to emit sulfur dioxide or nitrogen oxides in accordance with the provisions of this title. Nothing in this title or in any other provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization by Act of Congress. Consistent with section 512, nothing in this section relating to allowances shall be construed as affecting the application of, or compliance with, any other provision of this Act to an affected unit or source, including the provisions related to applicable National Ambient Air Quality Standards and State implementation plans. Allowances under this title may not be extinguished by the Administrator. Nothing in this section shall be construed as requiring a change of any kind in any State law regulating electric utility rates and charges or affecting any State law regarding such State regulation or as limiting State regulation (including any prudency review) under such a State law. Nothing in this section shall be construed as modifying the Federal Power Act or as affecting the authority of the Federal Energy Regulatory Commission under that Act. Nothing in this title shall be construed to interfere with or impair any program for competitive bidding for power supply in a State in which such program is established. Allowances, once issued to a person by the Administrator, may be received, held, and temporarily or permanently transferred in accordance with this title and the regulations of the Administrator without regard to whether or not a permit is in effect under title IV or section 507 with respect to the unit for which such allowance was originally issued and recorded. Each permit under this title and each permit issued under title IV for any affected unit shall provide that the affected unit may not emit an annual tonnage of sulfur dioxide in excess of the allowances allocated to that unit for the year concerned and issued to the owner or operator of the unit for that year, plus or minus the allowances transferred to or from the unit for that year or carried forward to that year from prior years. Nothing in title IV or section 507 shall be construed as affecting any allowances issued in accordance with this title or as authorizing a permitting authority to establish, in issuing a permit, conditions affecting allowances issued under this title.

“(g) Prohibition.—It shall be unlawful for any person to hold or transfer any allowance issued under this title, except in accordance with regulations issued by the Administrator.

“(h) Issuance.—The Administrator shall issue First Phase allowances under this title promptly following the promulgation of regulations under this section. The Administrator shall issue Second Phase allowances under this title promptly following publication of the list and the making of any required adjustments under subsection (i), but no later than 6 months after publication of the final list under subsection (i).

“(i) 8,900,000 Tons of Second Phase Allowances.—

“(1) List of allowances to be issued.—The Administrator shall publish, not later than December 31, 1991, but before issuing Second Phase allowances, a proposed list of all Second Phase allowances to be allocated and issued under this section based on this title (other than section 509). After notice and opportunity for public comment on such proposed list, but no later than December 31, 1995, the Administrator shall publish the final list of all Second Phase allowances.

“(2) 3,980,000 tons for clean units and small units.—If the Administrator determines that the total of Second Phase allowances to be issued under this title (other than under section 509) to units with an actual 1985 emissions rate below 1.2 lbs/mmBtu and to units with a nameplate capacity below 75 Mwe would be more or less than 3,980,000 tons per year, the Administrator shall adjust the number of allowances to be issued under this title for the Second Phase to those units to ensure that such tonnage will equal 3,980,000 tons per year. The Administrator shall reallocate any reduction or increase in allowances to each such affected unit on the basis of the ratio which the allowances which (but for the preceding sentence) would be issued to such unit bears to the total allowances which (but for the preceding sentence) would be issued to all of such units.

“(3) 4,920,000 tons for large units emitting at 1.2 or above.—If the Administrator determines that the total tonnage of Second Phase allowances to be issued under this title (other than section 509) to units with an actual 1985 emissions rate of 1.2 lbs/mmBtu or greater and a nameplate capacity of 75 Mwe or greater would be more or less than 4,920,000 tons per year, the Administrator shall adjust the allowances to be issued under this title for the Second Phase to those units to ensure that such allowances will equal 4,920,000 tons per year. The Administrator shall reallocate any reduction or increase in allowances to each such affected unit on the basis of the ratio which the tonnage of allowances which (but for the preceding sentence) would be issued to such unit bears to the total allowances which (but for the preceding sentence) would be issued to all of such units.

“(4) Total limit.—In no event shall the Administrator issue Second Phase allowances in excess of 8,900,000 tons per year under this title (other than under section 509).

“(5) Deduction and reserve to compensate for interruptible gas provisions.—In order to compensate for potential emissions of sulfur dioxide from interruptible gas units as described in section 505(h), in calculating under this subsection the allowances to be issued under this title (other than section 509), the Administrator shall deduct from the total allowances which would otherwise be issued to all affected units referred to in paragraph (2) for the Second Phase allowances equal to 75,000 tons per year. The Administrator shall credit such allowances to a Reserve for Gas Supply Interruptions. Every 3 years after establishing such reserve the Administrator shall allocate the unused allowances to all affected units referred to in paragraph (2) on a pro rata basis. For purposes of this paragraph, for any such unit, the term ‘pro rata basis’ means the ratio which the allowances allocated under this title to that unit bears to the allowances allocated under this title to all such units.

“(j) Energy Conservation and Renewable Energy.—

“(1) Definitions.—As used in this subsection:

“(A) The term ‘qualified energy conservation measure’ means a cost effective measure, as identified by the Administrator in consultation with the Secretary of Energy, that increases the efficiency of the use of electricity provided by an electric utility to its customers.

“(B) The term ‘qualified renewable energy’ means energy derived from biomass, solar, geothermal, or wind as identified by the Administrator in consultation with the Secretary of Energy.

“(C) The term ‘electric utility’ means any person, State agency, or Federal agency, which sells electric energy.

“(2) Allowances for emissions avoided through energy conservation and renewable energy.—

“(A) In general.—The regulations under paragraph (4) of this subsection shall provide that for each ton of sulfur dioxide emissions avoided by an electric utility, during the applicable period, through the use of qualified energy conservation measures or qualified renewable energy, the Administrator shall allocate and issue a single allowance to such electric utility, on a first-come-first-served basis from the Conservation and Renewable Energy Reserve established under subsection (k), to the extent allowances are available for issuance from such Reserve.

“(B) Requirements for issuance.—The Administrator shall issue allowances to an electric utility under this subsection only if all of the following requirements are met:

“(i) Such electric utility is paying for the qualified energy conservation measures or qualified renewable energy directly or through purchase from another person.

“(ii) The emissions of sulfur dioxide avoided through the use of qualified energy conservation measures or qualified renewable energy are quantified in accordance with regulations promulgated by the Administrator under this subsection.

“(iii)(I) Such electric utility has adopted and is implementing a least cost energy conservation and electric power plan which evaluates a range of resources, including new power supplies, energy conservation, and renewable energy resources, in order to meet expected future demand at the lowest system cost.

“(II) The qualified energy conservation measures or qualified renewable energy, or both, are consistent with that plan.

“(III) Electric utilities subject to the jurisdiction of a State regulatory authority must have such plan approved by such authority. For electric utilities not subject to the jurisdiction of a State regulatory authority such plan shall be approved by the entity with rate-making authority for such utility.

“(iv) In the case of a State regulated electric utility, the Secretary of Energy certifies that the State regulatory authority with jurisdiction over the electric rates of such electric utility has established rates and charges which ensure that the net income of such electric utility after implementation of specific cost effective energy conservation measures is at least as high as such net income would have been if the energy conservation measures had not been implemented. Upon the date of any such certification by the Secretary of Energy, all allowances which, but for this paragraph, would have been issued under subparagraph (A) before such date, shall be issued to the electric utility.

“(v) Such utility or any subsidiary of the utility's holding company owns or operates at least one affected unit.

“(C) Use of allowances.—The allowances issued under this subsection may be used to authorize emissions only at units owned or operated by an electric utility which is implementing a least cost energy plan meeting the requirements of subparagraph (B)(iii)(I) and approved as provided in subparagraph (B)(iii)(III).

“(D) Period of applicability.—Allowances under this subsection shall be issued only with respect to kilowatt hours of electric energy saved by qualified energy conservation measures or generated by qualified renewable energy after January 1, 1992 and before the earlier of (i) December 31, 2000, or (ii) the date on which any electric utility steam generating unit owned or operated by the electric utility to which the allowances are issued becomes subject to this title (including those sources that elect to become affected by this title, pursuant to section 509).

“(E) Determination of avoided emissions.—

“(i) Application.—In order to receive allowances under this subsection, an electric utility shall make an application which—

“(I) designates the qualified energy conservation measures implemented and the qualified renewable energy sources used for purposes of avoiding emissions,

“(II) calculates, in accordance with subparagraphs (F) and (G), the number of tons of emissions avoided by reason of the implementation of such measures or the use of such renewable energy sources; and

“(III) demonstrates that the requirements of subparagraph (B) have been met.

Such application for allowances by a State-regulated electric utility shall require approval by the State regulatory authority with jurisdiction over such electric utility. The authority shall review the application for accuracy and compliance with this subsection and the rules under this subsection. Electric utilities whose retail rates are not subject to the jurisdiction of a State regulatory authority shall apply directly to the Administrator for such approval.

“(F) Avoided emissions from qualified energy conservation measures.—For the purposes of this subsection, the emission tonnage deemed avoided by reason of the implementation of qualified energy conservation measures for any calendar year shall be a tonnage equal to the product of multiplying—

“(i) the kilowatt hours that would otherwise have been supplied by the utility during such year in the absence of such qualified energy conservation measures, by

“(ii) 0.004,
and dividing by 2,000.

“(G) Avoided emissions from the use of qualified renewable energy.—The emissions tonnage deemed avoided by reason of the use of qualified renewable energy by an electric utility for any calendar year shall be a tonnage equal to the product of multiplying—

“(i) the actual kilowatt hours generated by, or purchased from, qualified renewable energy, by

“(ii) 0.004,
and dividing by 2,000.

“(H) Prohibitions.—(i) No allowances shall be issued under this paragraph for the implementation of programs that are exclusively informational or educational in nature.

“(ii) No allowances shall be issued for energy conservation measures or renewable energy that were operational before January 1, 1992.

“(3) Savings provision.—Nothing in this subsection precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

“(4) Regulations.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990 and in conjunction with the regulations required to be promulgated under subsections (b) and (c), the Administrator shall, in consultation with the Secretary of Energy, promulgate regulations under this subsection. Such regulations shall list energy conservation measures and renewable energy sources which may be treated as qualified energy conservation measures and qualified renewable energy for purposes of this subsection. Allowances shall only be issued if all requirements of this subsection and the rules promulgated to implement this subsection are complied with. The Administrator shall review the determinations of each State regulatory authority under this subsection to encourage consistency from electric utility to electric utility and from State to State in accordance with the Administrator's rules. The Administrator shall publish the findings of this review no less than annually.

“(k) Conservation and Renewable Energy Reserve.—The Administrator shall establish a Conservation and Renewable Energy Reserve under this subsection. The reserve shall contain total allowances equal to 400,000 tons which shall be available for issuance following promulgation by the Administrator of regulations under this section, 200,000 tons of which may be used to authorize emissions after January 1, 2001 and the remaining 200,000 tons of which may only be used to authorize emissions after January 1, 2006. The Administrator shall issue allowances which can be used to authorize emissions after January 1, 2001 before issuing allowances which can only be used to authorize emissions after January 1, 2006. In order to establish 300,000 tons of such reserve, the Administrator shall reduce—

“(A) the tonnage specified in subsection (i)(2) by 10,000 tons per year for the first 10 years of the Second Phase, and

“(B) the tonnage specified in subsection (i)(3) by 20,000 tons per year for the first 10 years of the Second Phase.

The remaining 100,000 tons of such 400,000 ton total in the reserve shall be credited to the reserve, without regard to any limitations set forth in subsection (i). If allowances remain in the reserve after January 2, 2011, the Administrator shall allocate and issue 75 percent of such allowances to Second Phase affected units on a pro rata basis. For purposes of this paragraph, for any Second Phase unit, the term 'pro rata basis' refers to the ratio which the reductions made in such unit's allowances in order to establish the reserve under this paragraph bears to the total of such reductions for all Second Phase units.

“(l) Contingency Guarantee for Certain New Independent Power Production Facilities.—

“(1) Definitions.—For purposes of this subsection—

“(A) The term ‘independent power producer’ means any person who owns or operates, in whole or in part, one or more new independent power production facilities.

“(B) The term ‘new independent power production facility’ means a facility that—

“(i) is used for the generation of electric energy, 80 percent or more of which is sold at wholesale;

“(ii) is project-financed (as such term is defined by the Secretary of Energy within 3 months of the date of the enactment of the Clean Air Act Amendments of 1990);

“(iii) does not generate electric energy sold to any affiliate (as defined in section 2(a)(11) of the Public Utility Holding Company Act of 1935) of the facility's owner or operator; and

“(iv) is a new unit required to hold allowances under subsection (e).

“(C) The term ‘required allowances’ means the allowances required to operate such unit for so much of the unit's useful life as occurs after commencement of the Second Phase.

“(2) Entitlement to written guarantee.—Any independent power producer that submits an application to the Administrator establishing that such independent power producer—

“(A) proposes to construct a new independent power production facility for which allowances are required under this title;

“(B) will apply for financing to construct such facility after January 1, 1990, and before the date of the early auction under section 519(a);

“(C) has submitted to each owner or operator of an affected unit listed in table A (in section 504) a written offer to purchase the required allowances for \$750 per ton; and

“(D) has not received (within 180 days after submitting offers to purchase under subparagraph (C)) an acceptance of the offer to purchase the required allowances

shall, within 30 days after submission of such application, be entitled to receive the Administrator's written guarantee (subject to the eligibility requirements set forth in paragraph (3)) that such required allowances will be made available for purchase from the reserve established under section 519(c) and at a guaranteed price. The guaranteed price at which such allowances shall be made available for purchase shall be \$1,500 per ton, adjusted by the percentage, if any, by which the Consumer Price Index (as determined under section 402(b)(3)(B)(v)) for the year in which the allowance is purchased exceeds the Consumer Price Index for the calendar year in which the auction takes place.

“(3) Eligibility requirements.—The guarantee issued by the Administrator under paragraph (2) shall be subject to a demonstration by the independent power producer, satisfactory to the Administrator, that—

“(A) the independent power producer has—

“(i) submitted a good faith bid in the auction under section 519(a);

“(ii) made good faith efforts (after the auction under section 519(a)) to purchase the required allowances from the owners or operators of affected units to which allowances will be allocated, including efforts to purchase at annual auctions under section 519(b), and from industrial sources that have volunteered to become affected units pursuant to section 509; and

“(iii) such bids and efforts were unsuccessful in obtaining the required allowances; and

“(B) the independent power producer will continue to make good faith efforts to purchase the required allowances from the owners or operators of affected units and from industrial sources.

“(4) Issuance of guaranteed allowances from reserve under section 519(c).—From the reserve established under section 519(c)(2), upon payment of the guaranteed price, the Administrator shall issue to any person exercising the right to purchase allowances pursuant to a guarantee under this subsection the allowances covered by such guarantee. Persons to which guarantees under this subsection have been issued shall have the opportunity to purchase allowances pursuant to such guarantee from such reserve before the allowances in such reserve are offered for sale to any other person.

“(m) Incentive Allowances for Early Reductions.—(1) The Administrator shall promulgate regulations under this subsection within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990. Following promulgation of such regulations, the Administrator shall allocate and issue allowances during the First Phase to the owner or operator of each unit which is a First Phase affected unit if the owner or operator of the unit establishes to the satisfaction of the Administrator that—

“(A) the unit has reduced sulfur dioxide emissions in any year after the such date of enactment, but before the First Phase (hereinafter in this subsection referred to as the ‘prior year’),

“(B) such emission reductions are not otherwise required under this Act,

“(C) such emission reductions are obtained solely through the installation or additional use of a technological system of continuous emission reduction which achieves at least a 70 percent reduction from the potential combustion concentration; and

“(D) the unit complies with section 511 (relating to monitoring, reporting, and recordkeeping).

“(2) Each allowance issued as provided in this subsection shall authorize a single ton of sulfur dioxide emissions for a single year during the First or Second Phase. Except as provided below, the tonnage of allowances issued under this subsection for any unit shall be equal to the amount by which (A) the product of the unit's baseline multiplied by the unit's 1985 actual sulfur dioxide emissions rate (in lbs per mm Btu), divided by 2,000 lbs./ton exceeds (B) the unit's actual tonnage of sulfur dioxide emissions for the prior year concerned. No allowances shall be allocated as provided in this subsection for emission reductions resulting from reduced utilization. Allowances may be allocated under this subsection only for emission reductions achieved after the enactment of the Clean Air Act Amendments of 1990 as the result of the installation or additional use of a technological system of continuous reduction meeting the requirements of subparagraph (C) of paragraph (1).

“(n) Alternative Allowance Allocation for Units in Certain Utility Systems With Optional Baseline.—

“(1) Optional baseline for units in certain systems.—In the case of a First Phase unit which (as of the date of the enactment of the Clean Air Act Amendments of 1990)—

“(A) has an emission rate below 1.0 lbs mmBtu,

“(B) has decreased its emissions rate by 60 percent or greater since 1980, and

“(C) is part of a utility system which has a weighted average emission rate for all fossil fueled-fired units below 1.0 lbs/mmBtu,

at the option of the owner or operator of such unit, the unit's baseline may be calculated (i) as provided under section 502(a) (8), or (ii) by utilizing the unit's average annual fuel consumption at a 60 percent capacity factor. Such election shall be made no later than March 1, 1991.

“(2) Allowance allocation.—Whenever a unit referred to in paragraph (1) elects to calculate its baseline as provided in clause (ii) of paragraph (1), the Administrator shall allocate allowances to the unit for the First and Second Phase in an amount equal to the baseline selected multiplied by the lower of the average emission rate for such unit in 1989, or 1.0 lbs./mmBtu. Such allowance allocation shall be in lieu of any allocation of allowances under sections 504 and 505. For purposes of applying subsection (i), the units referred to in this subsection shall be treated as units with an actual 1985 emission rate of 1.20 lbs./mmBtu or greater, regardless of the option elected.

“SEC. 504. FIRST PHASE SULFUR DIOXIDE EMISSION REDUCTION PROGRAM.

“(a) First Phase Affected Units.—(1) For the First Phase (beginning December 31, 1995) each unit listed in table A is a First Phase affected unit under this section. Each source that includes one or more of such affected units is an affected source under this section.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

“(2) For the First Phase, each existing electric utility steam generating unit with nameplate capacity of 100 MWe or greater, not included in Table A, that emits sulfur dioxide at an annual rate of 2.50 lbs./mmBtu or greater, for any calendar year after the date of the date of enactment of the Clean Air Act Amendments of 1990 and prior to the Second Phase is also a First Phase affected unit under this section. The Administrator shall promulgate regulations to prevent abuse of this paragraph, which shall provide that no unit shall be treated as a First Phase affected unit to which allowances are allocated under section 503 where the Administrator finds that the owner or operator of the unit has increased the unit's emissions rate for any calendar year after such date of enactment for the purpose of becoming a First Phase affected unit under this section eligible to receive such allowances.

“(3) After the commencement of the First Phase, no First Phase affected unit referred to in paragraph (1) or (2) shall emit sulfur dioxide in any calendar year in a tonnage amount which exceeds the annual First Phase allowances allocated for that unit and issued to the owner or operator of the unit, plus or minus the allowances transferred to or from the unit, or carried forward from prior years.

“(b) First Phase Emission Tonnages.—For each affected unit listed in Table A, for the First Phase, the Administrator shall allocate to the unit and issue to the owner or operator of the unit the annual tonnage of sulfur dioxide allowances specified in Table A, reduced by 6 percent. For each affected unit described in subsection (a)(2), for the First Phase, the Administrator shall allocate to the unit and issue to the owner or operator of the unit annual tonnage of sulfur dioxide allowances equal to the product of such unit's baseline multiplied by an emission rate of 2.35 lbs/mmBtu, divided by 2,000 lbs/ton. The allowances calculated under this section shall apply only during the First Phase. Nothing in this subsection shall be construed to treat any unit which does not emit sulfur dioxide at a rate in excess of 2.50 lbs/mm Btu as a First Phase affected unit.

“(c) Authority To Substitute Units.—The owner or operator of an affected unit under subsection (a) may submit a proposal to substitute for any unit which is an affected unit under this section any other unit or units under the control of the same owner or operator. In order to make such substitution, the owner or operator shall submit an alternative proposal to the Administrator for approval in conjunction with submission of a permit application and compliance plan under section 507(c) (1). Any proposal must include—

“(1) designation of the substitute affected units to which the tonnage amounts under subsection (a) shall apply, in addition to, or in lieu of, the original affected units designated under that subsection;

“(2) specification of the baseline, the actual 1985 sulfur dioxide emission rate, and the authorized annual tonnage amount for the original affected unit;

“(3) calculation of the calendar year 1985 annual tonnage emitted by the substitute units, based on the baseline for each unit, as defined in section 502, multiplied by the unit's actual 1985 emission rate;

“(4) specification of the emission rates, and the annual tonnage amounts that would be applicable to the original and substitute affected units;

“(5) documentation, satisfactory to the Administrator, that the reassigned tonnage amounts will, in total, achieve the same or a greater reduction in emissions than the reduction that would have been achieved by the requirements of subsection (a); and

“(6) such other information as the Administrator may require.

The Administrator shall review and act on any proposal in accordance with subsection (d).

“(d) Administrator's Action on a Proposal.—(1) The Administrator shall review and approve any proposal meeting the requirements of subsection (c). If a proposal does not meet the requirements of subsection (c), the Administrator shall disapprove it. The Administrator shall act on a proposal within 6 months after receipt of a complete submission.

“(2) For an approved proposal, each substitute unit and source shall be deemed affected under this title and the Administrator shall act on the submission in accordance with section 507(c). The Administrator shall allocate allowances to the affected units in accordance with the approved proposal. For a disapproved proposal, the Administrator shall issue allowances in accordance with subsection (a). The Administrator's action on any proposal submitted under subsection (c) shall not require a hearing or opportunity for public comment, and shall not be subject to judicial review.

“(e) Compliance Extension for Certain Sources Using Certain Technological Means of Emissions Reduction.—No allowances shall be issued or required for calendar year 1996 for any affected unit which uses a technological means of continuous emission reduction (that commences operation after the enactment of the Clean Air Act Amendments of 1990 and achieves at least a 70 percent reduction from the potential combustion concentration) to control sulfur dioxide emissions for purposes of compliance with the requirements of this title during the First Phase. For any such unit, the allowances allocated to the unit for the last 4 years of the First Phase shall be reduced, under rules promulgated by the Administrator, by a total tonnage amount over such 4-year period equal to the amount by which the actual emissions of sulfur dioxide from the unit during the calendar year 1996 exceed the allowances which would (but for this subsection) be allocated to that unit for calendar year 1996. This subsection shall not apply to any unit for which allowances are allocated under subsection (m) (relating to incentive allowances for early reductions).

“(f) Two for One Allowance Program.—

(1) Reserve: total tonnage.—The Administrator shall establish a reserve of First Phase allowances to be allocated based on this subsection. The total tonnage of allowances in the reserve shall be equal to 6 percent of the total allowances specified (prior to the 6 percent reduction under section 504(b)) in Table A for the First Phase (other than the allowances specified in such table for the units referred to in section 518, relating to DOE units and any units which are not treated as First Phase affected units by reason of the last sentence of subsection (b)) multiplied by 5.

“(2) Additional allowances for certain units.—In addition to allowances allocated to units described in this paragraph under other provisions of this section, the Administrator shall allocate First Phase allowances under this paragraph to each First Phase affected unit which—

“(A) uses a technological means of continuous emission reduction (achieving at least a 70 percent reduction from the potential combustion concentration) to control sulfur emissions for purposes of compliance with the requirements of this title during the First Phase, which technological means commences operation after the date of the enactment of the Clean Air Act Amendments of 1990; and

“(B) emits sulfur dioxide during the First Phase at an annual rate of 1.20 lbs/mmBtu or less.

“(3) Additional allowance allocations.—The tonnage of additional allowances allocated under paragraph (2) to each unit referred to in paragraph (2) shall be equal (to the extent adequate allowances are available in the reserve referred to in paragraph (1)) to the amount by which (A) the product of 1.2 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000, exceeds (B) the projected actual annual tonnage emitted by the unit during the First Phase, as determined by the Administrator under regulations promulgated by the Administrator. Such regulations shall insure that such allowances are allocated equitably among the units referred to in paragraph (2) and that the projected emission reductions are achieved by the units to which such allowances are issued. If allowances remain in the reserve at the end of the First Phase, such remaining allowances shall be allocated and issued to all First Phase affected units on a pro rata basis. For purposes of the preceding sentence, for any First Phase unit, the term ‘pro rata basis’ refers to the ratio which the First Phase allowances allocated to that unit under this title (determined without regard to this subsection) bears to the total of all First Phase allowances allocated to all First Phase units under this title (determined without regard to this subsection).

“SEC. 505. SECOND PHASE SULFUR DIOXIDE EMISSIONS REDUCTION PROGRAM.

“(a) Second Phase Affected Units.—(1) During the Second Phase each unit for which an annual tonnage of Second Phase allowances is allocated as provided in this section shall be a Second Phase affected unit under this section. Each source that includes one or more Second Phase affected units under this section shall be an affected source for the Second Phase.

“(2) During the Second Phase, no Second Phase affected unit shall emit sulfur dioxide in an annual tonnage amount which exceeds the Second Phase allowances allocated for that unit and issued to the owner or operator of the unit under section 503, plus or minus the allowances transferred to or from the unit, or carried forward from prior years.

“(b) Electric Utility Steam Generating Units 75 MWe or Above Emitting 1.20 lbs MmBtu or Above.—For each year during the Second Phase, the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with a nameplate capacity of 75 MWe or greater and an actual 1985 emissions rate of 1.20 lbs/mmBtu or greater (as certified by the owner or operator thereof) in an amount equal to the product of the unit's baseline, multiplied by an emissions rate equal to 1.20 lbs/mmBtu, divided by 2,000 lbs/ton.

“(c) Electric Utility Steam Generating Units Below 75 MWe Emitting 1.20 lbs MmBtu or Above.—

“(1) In general.—For each year during the Second Phase, the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with a nameplate capacity below 75 MWe and an actual 1985 emissions rate of 1.20 lbs/MMBtu or greater in accordance with the same rules as are applicable under subsection (b), except as otherwise provided in this subsection.

“(2) Election for small systems.—(A) If a unit referred to in paragraph (1) is owned by an electric utility with, as of December 31, 1989, a total steam electric generating capacity of 500 megawatts or less, the owner or operator of the unit may make an election to be covered by this paragraph for the period January 1, 2001 to December 31, 2010 (or for such shorter period

as adequate allowances are available in the Small System Account established under this paragraph). Such election shall be made by January 1, 1997, and may be revoked at any time after that date. During the period that any such election is in effect, the unit may emit sulfur dioxide in excess of the allowances allocated to the unit under paragraph (1) if the unit does not exceed an annual emissions rate equal to the unit's 1985 annual average emissions rate. The allowances allocated to the unit pursuant to paragraph (1) for such 10-year period shall be treated as used by the unit and may not be transferred or banked for as long as the election remains in effect.

“(B) No later than January 1, 1998, and before January 1 of each successive year through 2009, for each unit for which an election is in effect under this paragraph, the Administrator shall forecast or calculate, as appropriate, the annual tonnage of sulfur dioxide emissions from the unit in excess of the allowances allocated for that unit under paragraph (1). Such excess shall hereinafter in this paragraph be referred to as the ‘excess tonnage’. Allowances equal to the excess tonnage shall be deducted from the Small System Account established under subparagraph (D) of this paragraph. On each of the dates referred to in the preceding sentence, the Administrator shall issue a public report specifying the number of allowances to be deducted from the Small System Account for units for which an election is in effect under this paragraph, the number of allowances previously deducted from the Account, the number of allowances remaining available in the Account, and the projected period for which allowances will be available in the Account under this paragraph.

“(C)(i) The Administrator is authorized, on petition of an owner or operator of a unit with a nameplate capacity below 75 Mwe that is part of an electric utility system as described to clause (ii) that is particularly well controlled and primarily dependent on units with a nameplate capacity below 75 Mwe, to treat any such unit as a unit owned by a utility referred to in subparagraph (A) for purposes of participation in the Small System Account so long as such units do not exceed a 2.5 lb/mmBtu emission rate for sulfur dioxide.

“(ii) The electric utility system referred to in clause (i) is any system (I) which, as of the date of the enactment of the Clean Air Act Amendments of 1990, had at least 20 percent of its fossil-fuel capacity controlled by flue gas desulfurization devices, (II) which has more than 10 percent of its fossil-fuel capacity consisting of coal-fired units of less than 75 Mwe, and (III) which has no large units (greater than 400 Mwe) with easy or modest FGD Retrofit Cost Factors (according to the Emissions and the FGD Retrofit Feasibility at the 200 Top Emitting Generating Stations, prepared for the United States Environmental Protection Agency on January 10, 1986).

“(D) For purposes of this paragraph, the Administrator shall establish a Small System Account which shall contain (prior to any deductions under this paragraph) total allowances equal to the difference between—

“(i) 2.5 lbs/mmBtu multiplied by the baseline of each of the units subject to section 518 (relating to DOE units), and

“(ii) 0.4 lbs/mmBtu multiplied by the baseline of each of such units,

multiplied by 5 and divided by 2,000 lbs per ton.

“(d) Electric Utility Steam Generating Units Emitting Below 1.20 lbs/mmBtu in 1985.—

“(1) In general.—Except as otherwise provided in this subsection, for each year during the Second Phase the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with an actual 1985 sulfur dioxide emission rate below 1.20 lbs/mmBtu in an annual amount equal to the product of the unit's baseline multiplied by the unit's 1985 actual emissions rate, divided by 2,000 lbs/ton, unless the owner or operator of the unit elects an alternative allowance amount under subsection (e). Such election and any other election under subsection (e), shall be made no later than March 1, 1991.

“(2) 100 percent gas units.—Allowances shall not be required during the Second Phase for, and the Administrator shall not allocate or issue Second Phase allowances for, an electric utility steam generating unit with an actual 1985 sulfur dioxide emission rate below 0.20 lbs/mmBtu which burns only natural gas as a fuel and which burned only natural gas as a fuel during the calendar years 1985 through 1987. If a unit covered by this paragraph exceeds any fuel or emissions requirement set forth in this subsection, this subsection shall not apply and the unit shall be treated as a new electric utility steam generating unit required to obtain allowances under this title.

“(3) Certain ultra clean units with low capacity factors in 1985.—For the purposes of this section, in the case of any unit operated by a utility that furnishes electricity, electric energy, steam, and natural gas within an area consisting of a city and 1 contiguous county, and in the case of any unit owned by a State authority, the output of which unit is furnished within that same area consisting of a city and 1 contiguous county, the Administrator shall allocate and issue under section 503 from the reserve under paragraph (5), to the extent allowances are available in such reserve, in addition to the allowances otherwise allocated to such units under this section, 7,000 allowances to the utility and 2,000 allowances to the State authority. Such allowances shall be hereinafter referred to in this subsection as ‘additional allowances’.

“(4) Units which converted to coal.—For each year during the Second Phase, the Administrator shall allocate and issue under section 503 from the reserve under paragraph (5), to the extent allowances are available in such reserve, allowances for each existing utility unit located east of the Mississippi that has completed conversion from predominantly gas fired operation to coal fired operation between January 1, 1985, and December 31, 1987, for which there has been issued a proposed or final prohibition order pursuant to section 301(b) of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8301 et seq., repealed 1987) in an annual amount equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of 1.20 lbs/mmBtu or the unit's allowable sulfur dioxide emissions rate, divided by 2,000 lbs/ton, unless the owner or operator of such unit has obtained allowances equal to its actual emissions. Allowances allocated and issued under this paragraph to any such unit that are additional to the allowances which would otherwise be issued to the unit under this section shall be hereinafter in this subsection referred to as ‘additional allowances’.

“(5) Special reserve for additional allowances under paragraphs (3) and (4).—For purposes of allocating and issuing the additional allowances referred to in paragraphs (3) and (4), the Administrator shall reserve from the allowances allocated and issued during the Second Phase to units referred to in section 503(i)(3) allowances equal to 13,300 tons per year. For purposes of adjusting the allowances issued under this Act pursuant to section 503(i)–

“(A) the additional allowances allocated and issued to any unit under paragraph (3) and (4) shall be treated as allowances for units referred to in section 503(i)(3) and shall not be treated as allowances for units referred to in section 503(i)(2), but

“(B) such additional allowances shall not be subject to adjustment and reallocation under section 503(i).

Nothing in the preceding sentence shall be construed to affect the application of section 503(i) or any other provision of this title to allowances allocated and issued to units referred to in paragraph (3) or (4) which are not additional allowances within the meaning of paragraph (3) or (4).

“(e) Election for Certain Units Emitting Below 1.20 lbs/mmBtu–

“(1) Coal units emitting 0.6 or less.—For the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is a coal-fired unit with an actual 1985 sulfur dioxide emission rate of 0.60 lbs/mmBtu or less, the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of the rate computed under subparagraph (A) multiplied by the fuel consumption computed under subparagraph (B), divided by 2,000 lbs/ton.

“(A) The rate computed under this paragraph shall be the most stringent of:

“(i) 0.60 lbs/mmBtu, or

“(ii) the most stringent emission rate (if any) (in lbs/mmBtu) applicable to the unit under the applicable implementation plan, as in effect on December 31, 1989, based on documentation in existence before January 1, 1990.

“(B) The fuel consumption computed under this subparagraph shall be one of the following (as elected by the owner or operator):

“(i) the unit's fuel consumption at a 60 percent capacity factor, or

“(ii) the unit's baseline multiplied by 120 percent.

An election to use either clause (i) or (ii) for purposes of this subparagraph for any unit owned by any owner or operator shall apply with respect to all other units owned or operated by the owner or operator which are subject to this paragraph.

“(2) Coal units emitting 0.6 to 1.2.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is a coal-fired unit with an actual 1985 sulfur dioxide emission rate greater than 0.6 lbs/mmBtu (but less than 1.2 lbs/mmBtu), the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of the unit's 1985 actual emissions rate, multiplied by one of the following (as elected by the owner or operator), divided by 2,000 lbs/ton:

“(A) the unit's fuel consumption at a 60 percent capacity factor, or

“(B) the unit's baseline multiplied by 120 percent.

An election to use either subparagraph (A) or (B) for purposes of this paragraph for any unit owned by any owner or operator shall apply with respect to all other units which are owned or operated by that owner or operator and which are subject to this paragraph.

“(3) Certain oil or gas units emitting 0.6 or less.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is an oil- or gas-fired unit with an actual 1985 sulfur dioxide emission rate of 0.6 lbs/mmBtu or less, the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of 120 percent of the unit's baseline multiplied by the most stringent of the following, and divided by 2,000 lbs/ton:

“(A) 0.6 lbs/mmBtu.

“(B) The most stringent emission rate for fuel oil, if any, in lbs/mmBtu applicable to the unit under the applicable implementation plan in effect on December 31, 1989, based on documentation in existence before January 1, 1990.

No unit which burned as its fuel during the period 1980 through 1989 on average more than 90 percent natural gas may elect to have allowances allocated and issued as provided in this paragraph.

“(4) Oil or gas units emitting 0.6 to 1.2.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is an oil- or gas-fired unit with an actual 1985 sulfur dioxide emission rate greater than 0.6 lbs/mmBtu (but less than 1.2 lbs/mmBtu), the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of 120 percent of the unit's baseline, multiplied by the unit's actual 1985 emissions rate, divided by 2,000 lbs/ton.

“(f) Certain Units Treated as Existing Units.—For the Second Phase, the Administrator shall allocate and issue allowances under section 503 to each electric utility steam generating unit which is listed in Table B of this subsection in an annual amount equal to the amount specified in Table B.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

For purposes of making adjustments under section 503(i), the units referred to in this subsection shall be treated as units described in section 503(i)(3). No allowances shall be allocated under this subsection to a unit listed in Table B that fails to commence commercial operation before December 31, 1995.

“(g) Baseline for Certain Units in State Experiencing 25 Percent Population Growth.—(1) For each existing electric utility steam generating unit in commercial operation before January 1, 1985 and operating in a State which—

“(A) has experienced population growth in excess of 25 percent between 1980 and 1988 (according to State Population and Household Estimates, with Age, Sex, and Components of Change: 1981–1988, issued by the United States Department of Commerce), and“(B) had an installed electric generation capacity of more than 30,000,000 kw in 1988,

the baseline for purposes of this section shall be the annual average fuel consumption (in mmBtu) during any 3 consecutive calendar years between 1980 and 1989 (as selected by the owner or operator) in lieu of the years otherwise applicable for such purposes under section 502(a)(8). Such election shall be made not later than March 1, 1991.

“(2) The Administrator shall calculate the amount by which annual allowances allocated to the units referred to in paragraph (1) exceeds the amount of annual allowances which would be allocated to such units in the absence of paragraph (1). The amount of such excess allowances (if any) issued to such units shall be adjusted pro rata to ensure that the total of such excess allowances allocated to all such units will equal 40,000. For such purposes, the term ‘pro rata’ refers to the ratio which the allowances which would be issued to each such unit (without regard to the 40,000 allowance limitation) bears to the allowances which would be issued to all such units (without regard to such 40,000 allowance limitation).

“(3) In order to allocate and issue allowances to the units referred to in paragraph (1), the Administrator shall reserve allowances in the amount of 40,000 each year from the Second Phase allowances withheld under section 519(b).

“(h) Interruptible Gas Units.—(1) This subsection shall apply only to electric utility steam generating units which burned as their fuel during the period 1980 through 1989 more than 90 percent natural gas, and which purchase natural gas under an interruptible contract. Each such unit shall be referred to in this subsection as an ‘interruptible gas unit’.

“(2) So long as sufficient allowances are available in the Reserve for Gas Supply Interruptions established under section 503(i)(5), the Administrator shall issue to the owner or operator of any interruptible gas unit (and deduct from such reserve) allowances for emissions of sulfur dioxide for any year during the Second Phase at a tonnage level in excess of the allowances otherwise allocated and issued to the unit under this section if each of the following requirements are met:

“(A) The excess emissions referred to in this paragraph are temporary emissions during a period or periods in which natural gas supplies are interrupted (as certified by the owner or operator in such form as the Administrator may require) under—

“(i) an interruptible contract, or

“(ii) State law,

by reason of either weather or other unusual factors not under the control of the owner or operator of the unit. The total of the periods of such interruption in any calendar year may not exceed 25 percent of that calendar year (hereinafter in this paragraph referred to as the ‘interruption period’).

“(B) During the interruption period, emissions of sulfur dioxide from the unit shall not exceed the lower of—

“(i) 0.5 lbs per million Btu, or

“(ii) the most stringent rate applicable to the unit under the applicable implementation plan.

“(C) The unit burns as its fuel more than 90 percent natural gas during any period other than the interruption period.

“(3) If an interruptible gas unit fails to meet any requirement of this subsection, the owner or operator of the unit shall be required to obtain allowances under this title for the excess emissions referred to in paragraph (2).

“SEC. 506. NITROGEN OXIDES EMISSION REDUCTION PROGRAM.

“(a) Program.—Emission rate requirements for nitrogen oxides shall be met in the Second Phase by coal-fired electric utility steam generating units with a nameplate capacity of 75 MWe or greater. Emission rate requirements under this section shall not apply to cyclone or wet-bottom boilers unless the Administrator promulgates a rule under subsection (c), and includes in such rule the finding referred to in the last sentence of subsection (c). For cell burners, any such emission rate requirement shall be based on commercially available burner technology.

“(b) No_x Emission Rate Limitations.—The Administrator shall, by rule, within 3 years after the enactment of the Clean Air Act Amendments of 1990 establish a program under this section and section 111 to reduce total nitrogen oxide emissions by approximately 2,500,000 tons below 1989 projected emissions for calendar year 2000. Pursuant to such program, the Administrator shall establish emission rate limitations under this section, to take effect at the beginning of Second Phase based on the application of low nitrogen oxides burner technology for each type of boiler. In establishing such limitations the Administrator shall take into consideration boiler age and configuration, safety, efficiency, technology, and other relevant factors. In addition, if necessary for purposes of such program, the Administrator shall, consistent with the requirements of section 111, revise new source performance standards under section 111 for emissions of oxides of nitrogen from electric utility steam generating units to insure that such new source performance standards are no less stringent than the emission rate limitations required under this subsection. Any unit subject to an emission rate limitation under this section shall not be an affected unit for nitrogen oxides for purposes of this title, except as provided in section 509.

(c) Adjustment of 2,500,000 Ton Reduction.—The Administrator may promulgate a rule in calendar year 1996 or any time thereafter increasing the tonnage of reductions in oxides of nitrogen required to be achieved under this section from 2,500,000 tons up to not more than 4,000,000 tons if the Administrator finds, in such rule, that such reductions are—

(1) needed either for purposes of reducing acid deposition or for meeting the national primary ambient air quality standard for ozone, and

(2) cost effective, taking into consideration alternative means of reducing such deposition or achieving such standard under this Act, and the practicability of the necessary control technology.

In making any finding under item (1) above, the Administrator shall take into account (A) the reductions in oxides of nitrogen achieved or expected to be achieved under other provisions of this Act and (B) the findings of the study under section 185B. Such rule shall include an explanation of the basis for such findings. To provide such reductions, the Administrator (as part of such rule) may establish or revise new source performance standards under section 111 for nitrogen oxide control. Such rule shall provide reasonable lead time, taking into consideration safety, costs, technology, and other relevant factors, including the requirements of subsection (b). Any such rule may apply to cyclone or wet-bottom boilers, or both, if the Administrator finds that methods are available for reducing emissions from such boilers that are as cost effective as the application of low nitrogen oxides burner technology in the case of wall-fired or tangentially-fired boilers.

“SEC. 507. PERMITS AND COMPLIANCE PLANS.

“(a) Permit Program.—The provisions of this title shall be implemented, subject to section 503, by permits issued to units subject to this title in accordance with the provisions of title IV, as modified by this title. Any such permit issued by the Administrator, or by a State with an approved permit program, shall prohibit—

“(1) annual emissions of sulfur dioxide or nitrogen oxides (if applicable) in excess of the allowances allocated to that unit for the year concerned and issued to the owner or operator of the unit for that year, plus or minus the allowances transferred to or from the unit for that year or carried forward to that year from prior years;

“(2) exceedances of applicable emissions rates, and

“(3) contravention of any other provision of the permit.

Permits issued to implement this title shall be issued for a period of 5 years, notwithstanding title IV.

“(b) Compliance Plan.—Each initial permit application shall be accompanied by a compliance plan for the source to comply with its requirements under this title. Where an affected source consists of more than one affected unit, such plan shall cover all such units, and for purposes of section 402(c), such source shall be considered a ‘facility’. Nothing in this section regarding compliance plans or in title IV shall be construed as affecting allowances. The compliance plan shall provide all necessary information on the schedule and means by which the source will achieve compliance with its First or Second Phase requirements, including specification of any additional allowances beyond the initial allocation that will be used to achieve compliance. The Administrator may also require—

“(1) for a source, a demonstration of attainment of national ambient air quality standards, and

“(2) from the owner or operator of two or more affected sources, an integrated compliance plan providing an overall plan for achieving compliance at the affected sources.

“(c) First Phase Permits.—The Administrator shall issue permits to First Phase affected sources under section 504.

“(1) Permit application and compliance plan.—(A) Not later than 27 months after the date of the enactment of the Clean Air Act Amendments of 1990, the owner or operator of each First Phase affected source under section 504 shall submit a permit application and compliance plan for that source in accordance with regulations issued by the Administrator under paragraph (3). The permit application and the compliance plan shall be binding on the owner or operator for purposes of this title and section 402(a), and shall be enforceable in lieu of a permit until a permit is issued by the Administrator for the source.

“(B) In the case of a compliance plan for a First Phase affected source under section 504 for which the owner or operator proposes to meet the requirements of that section by reducing utilization of the unit by 20 percent or more, as compared with the baseline prescribed in section 502(8)(A), or by shutting down the unit, the owner or operator of the unit shall include in the compliance plan a specification of the means to compensate for the reduced output of the affected source, including a specification of (i) any other source of electric energy, (ii) any energy conservation or load management programs, and (iii) any imported energy or the other energy that will provide electrical generation. The affected source, and any unit to be used for such compensating generation, if not otherwise affected under section 504, shall be deemed affected under section 504 and subject to the Phase I requirements of this title, except that allowances shall be allocated to such unit in an amount equal to the product of the unit's baseline multiplied by the unit's actual 1985 emission rate, divided by 2000 lbs/ton.

“(2) EPA action on compliance plans.—If the Administrator determines that a proposed compliance plan does not satisfy the requirements of this title or title IV, the plan shall be disapproved within 6 months after receipt of a complete submission.

If a plan is disapproved, it may be resubmitted for approval with such changes as the Administrator shall require consistent with the requirements of this title and within such period as the Administrator prescribes as part of such disapproval.

“(3) Regulations; issuance of permits.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations, in accordance with title IV, to implement a Federal permit program to issue permits for affected sources under this title. Following promulgation, the Administrator shall issue a permit to implement the requirements of section 504 and the allowances provided under section 503 to the owner or operator of each affected source under section 504. Such a permit shall supersede any permit application and compliance plan submitted under paragraph (1).

“(4) Fees.—During the First Phase, no fee shall be required to be paid under section 402(b)(3) or under section 110(a)(2) (L) with respect to emissions from any unit which is a First Phase affected unit under section 504.

“(d) Governor's Approval.—Any owner or operator submitting a First Phase permit application and compliance plan under subsection (c) shall request an approval from the Governor of any State within which the source is located that the application and compliance plan are consistent with State law. Where required by State law, the Governor's approval may preclude the use of coal produced outside the State at the source. The Governor's approval shall be a condition of any permit issued by the Administrator to the source unless the Administrator, within 60 days after receipt, notifies the Governor that the approval is inconsistent with the provisions or purposes of the Act or with other compelling national interest. In the event that the Governor fails or refuses to act on a request for approval within 90 days after receipt of the request, the requirements of this subsection shall be waived with respect to such application and compliance plan.

“(e) Second Phase Permits.—(1) To provide for permits for (A) new electric utility steam generating units required under section 503(e) to have allowances, (B) affected units or sources under section 505, and (C) existing coal-fired electric utility steam generating units subject to nitrogen oxide emission reductions under section 506, each State in which one or more such units or sources are located shall submit in accordance with title IV, a permit program for approval as provided by that title. Upon approval of such program, for the units or sources subject to such approved program the Administrator shall suspend the issuance of permits as provided in section 402(e) of title IV.

“(2) The owner or operator of each affected source under section 505 shall submit a permit application and compliance plan for that source to the permitting authority, not later than January 1, 1996.

“(3) Not later than December 31, 1997, each State with an approved permit program shall issue permits to the owners or operators of affected sources under section 505 (Second Phase affected sources) that satisfy the requirements of title IV and this title and that submitted to such State a permit application and compliance plan pursuant to paragraph (2). In the case of a State without an approved permit program by July 1, 1996, the Administrator shall, not later than January 1, 1998, issue a permit to the owner or operator of each such affected source. In the case of affected sources for which applications and plans are timely received under paragraph (2), the permit application and the compliance plan, including amendments thereto, shall be binding on the owner or operator and shall be enforceable as a permit for purposes of this title and section 402(a) until a permit is issued by the permitting authority for the affected source. The provisions of section 558(c) of title V of the United States Code (relating to renewals) shall apply to permits issued by a permitting authority under this title and title IV.

“(4) The permit issued in accordance with this subsection for an affected source shall provide that the affected units at the affected source may not emit an annual tonnage of sulfur dioxide in excess of the allowances allocated to each such unit and issued to the source for the year concerned, plus or minus the allowances transferred to or from such units for that year or carried forward from prior years. In the case of a unit referred to in section 505(c)(2), relating to election for small systems, the permit shall also provide that such unit may not exceed the annual emissions rate specified in that section.

“(f) Units Subject to Certain Other Limits.—The owner or operator of any unit subject to an emission rate requirement under section 506 shall submit a permit application and compliance plan for such unit to the permitting authority, not later than January 1, 1998. The permitting authority shall issue a permit to the owner or operator that satisfies the requirements of title IV and this title, including any appropriate monitoring and reporting requirements. Unless designated under section 509, such a unit shall not receive, and is not obligated to emit oxides of nitrogen in conformance with, allowances issued for oxides of nitrogen under this title.

“(g) New Units.—The owner or operator of each source that includes a new electric utility steam generating unit shall submit a permit application and compliance plan to the permitting authority not later than 24 months before the later of (1) the date of the commencement of the Second Phase, or (2) the date on which the unit commences operation. The permitting authority shall issue a permit to the owner or operator of the unit that satisfies the requirements of title IV and this title.

“(h) Amendment of Application and Compliance Plan.—At any time after the submission of an application and compliance plan under this section, the applicant may submit a revised application and compliance plan, in accordance with the requirements of this section. In considering any permit application and compliance plan under this title, the permitting authority shall ensure coordination with the applicable electric ratemaking authority, in the case of regulated utilities, and with unregulated public utilities.

“(i) Prohibition.—(1) It shall be unlawful for an owner or operator required to submit a permit application or compliance plan under this title to fail to submit such application or plan in accordance with the deadlines specified in this section or to otherwise fail to comply with regulations implementing this section.

“(2) It shall be unlawful for any person to operate any source subject to this title except in compliance with the terms and requirements of a permit application and compliance plan (including amendments thereto) or permit issued by the Administrator or a State with an approved permit program. For purposes of this subsection, compliance, as provided in section 404(g), with a permit issued under title IV which complies with this title for sources subject to this title shall be deemed compliance with this subsection as well as section 402(a).

“(3) In order to ensure reliability of electric power, nothing in this title or title IV shall be construed as requiring termination of operations of an electric utility steam generating unit for failure to have an approved permit or compliance plan, except that any such unit may be subject to the applicable enforcement provisions of section 113.

“SEC. 508. REPOWERED UNITS.

“(a) Availability.—Not later than January 1, 1998, the owner or operator of any Second Phase affected unit may demonstrate to the permitting authority that such unit will be repowered with a qualifying clean coal technology to comply with the requirements applicable to that unit pursuant to section 505 or 506. The owner or operator shall, as part of any such demonstration, provide, not later than December 31, 2000, satisfactory documentation of a preliminary design and engineering effort for such repowering, an executed contract for the majority of the equipment to repower such unit, and such other information as the Administrator may require by regulation. The replacement of an existing electric utility steam generating unit with a new electric utility steam generating unit using a repowering technology referred to in section 502(a)(14) which is located at a different site, shall be treated as repowering of the existing unit for purposes of this title and such replacement unit shall not be treated as a new electric utility steam generating unit within the meaning of section 502 if—

“(1) the replacement unit is designated by the owner or operator to replace such existing unit,

“(2) the existing unit is retired from service on or before the date on which the designated replacement unit enters commercial operation, and

“(3) the designated replacement unit is located in the same air quality control region as the existing unit.

“(b) Extension.—(1) An owner or operator satisfying the requirements of subsection (a) for any unit shall be granted an extension of the date on which such unit is required to comply with Second Phase requirements. Such date shall be extended from December 31, 2000 to December 31, 2003. The extension shall be specified in the permit issued to the source under section 507, together with any compliance schedule and other requirements, consistent with this title, necessary to meet Second Phase requirements by the extended date. Any unit that is granted an extension under this section shall not be eligible for a waiver under section 111(j).

“(2) If (A) the owner or operator of an existing unit has been granted an extension under paragraph (1) in order to repower such unit with a clean coal unit, and (B) such owner or operator demonstrates to the satisfaction of the Administrator that the repowering technology to be utilized by such unit has been properly constructed and tested on such unit, but nevertheless has been unable to achieve the emission reduction limitations and is economically or technologically infeasible, such existing unit may be retrofitted or repowered with equipment or facilities utilizing another clean coal technology or other available control technology.

“(c) Control Requirements.—A repowered unit replacing an existing unit qualifying for an extension under this section shall not be required to meet any standard of performance under section 111. A repowered unit replacing an existing unit qualifying for an extension under this section shall not be subject to the requirements of part C or D of this Act if the projected emissions from the repowered unit will not result in an increase in emissions, relative to predemonstration actual emissions of the existing unit, as determined by the Administrator, of any pollutant regulated under this Act. For purposes of calculating projected emissions for purposes of this paragraph, a 70 percent capacity factor shall be used. Notwithstanding the provisions of this subsection, no new unit (1) designated as a replacement for an existing unit, (2) qualifying for the extension under subsection (b), and (3) located at a different site than the existing unit shall receive an exemption from the requirements imposed under section 111 and parts C and D of the Act.

“(d) Allowances.—(1) For the 3-year extension period granted to an affected unit under this section, the Administrator shall issue to the owner or operator of the affected unit, annual allowances for sulfur dioxide equal to the affected unit's baseline multiplied by the lesser of—

“(A) emissions limit for sulfur dioxide applicable to the unit under the applicable implementation plan, or

“(B) its actual emission rate for 1996.

Such allowances may not be transferred or used by any other source to meet requirements of this title.

“(2) The owner or operator of the affected unit for which an extension has been granted under this section shall notify the Administrator 60 days in advance of the date on which the affected unit is to be removed from operation to install the repowering technology. Effective on that date, allowances shall be issued for the unit in the tonnage calculated by multiplying 1.20 lbs/mmBtu times the unit's baseline, divided by 2,000 lbs/ton. Allowances for the year in which the source is removed from operation to install the repowering technology shall be prorated accordingly, and are transferable.

“(3) In the case of any unit for which an extension has been granted under this section, the allowances allocated and issued for calendar years after repowering is complete shall be equal to 1.20 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000 lbs/ton.

“(4) Allowances shall be allocated and issued under this section for a designated replacement unit which replaces an existing unit (as provided in the last sentence of subsection (a)) in lieu of allocating and issuing allowances for the existing unit.

“(5) For the purpose of making adjustments under section 503(i), the units with an extension under this subsection shall be treated as having allowances allocated and issued under paragraph (3).

“(e) Certain Units Selected for Negotiations.—For purposes of allocating and issuing Second Phase allowances under this title, in the case of any oil and gas fired electric utility steam generating unit which has been selected for negotiations leading to award of clean coal demonstration funding by the Secretary of Energy before July 27, 1989, the Administrator shall allocate allowances to such unit in accordance with paragraph (3) of subsection (d), in lieu of allocating allowances to that unit pursuant to section 505, but no such unit shall be eligible for an extension under this section.

“(f) Prohibition.—It shall be unlawful for the owner or operator of a repowered source to fail to comply with the requirements of this section, and any regulations to implement this section.

“SEC. 509. ELECTION FOR ADDITIONAL SOURCES.

“(a) Applicability.—The owner or operator of any existing unit or process source that is not an affected unit for sulfur dioxide or oxides of nitrogen, or both as the case may be, may elect to designate that unit or process source as an affected unit under this section for such pollutant or pollutants. Such an election may be submitted to the Administrator for approval anytime after promulgation of regulations under this section. The Administrator shall approve a designation that meets the requirements of this section. Following approval, such designated unit or process source shall be treated as an affected unit for purposes of this title and shall receive allowances as provided in this section for periods following such approval.

“(b) Establishment of Baseline.—The baseline for a unit designated as an affected unit under this section shall be established by the Administrator by regulation, based on fuel consumption and operating data for the unit for calendar years 1985, 1986, and 1987, or if not available, the Administrator may prescribe a baseline based on alternative representative data.

“(c) Allowances for Affected Units.—(1) Allowances allocated and issued under this title for sulfur dioxide or nitrogen oxides to a unit which is an affected unit under this section shall be equal to the product of the unit's baseline multiplied by the unit's actual 1985 emission rate in lbs/mmBtu, divided by 2,000 lbs/ton.

“(2) Beginning in the Second Phase, the allowances for oxides of nitrogen for a unit for which an election is in effect under this section for oxides of nitrogen shall be determined based on the rate prescribed under section 506 for any unit subject to that section and any such unit shall be required only to comply with such allowances and shall not also be subject to an emission rate requirement under section 506.

“(3) This subsection shall not apply to any process source.

“(d) Process Sources.—The Administrator shall establish, by regulation by 1995, a program for designation of process sources which commenced operation before the date of the enactment of the Clean Air Act Amendments of 1990 as affected units for purposes of this section. The Administrator shall define the sources that may be included (not including any unit as defined under this title), specify the emission baseline and other data requirements, prescribe CEMS or other monitoring requirements, and promulgate permit, reporting, and any other requirements necessary to implement such a program.

“(e) Allowances and Permits.—The Administrator shall issue allowances to an affected unit under this section in an amount equal to the allowances calculated under subsection (c) or (d), in accordance with section 503. Section 503(i) shall not apply to the allowances issued under this section. Such allowances may be transferred and banked in accordance with the provisions of this title. The permitting authority shall issue a permit for units and process sources which are designated as affected units under this section in the same manner as provided in section 507.

“(f) Limitation.—Any unit or process source which is designated under this section as an affected unit shall not transfer or bank allowances produced as a result of emission reductions resulting from reduced utilization or shutdown or compliance with any other provisions of this Act (other than section 112 or this title) except that in the case of a reduced utilization or shutdown such allowances may be transferred or carried forward for use in subsequent years to the extent that—

“(1) any such reduced utilization or shutdown results from the replacement of thermal energy from the unit designated under this section with thermal energy generated by any other unit or units subject to the requirements of this title, and

“(2) the designated unit's allowances are transferred or carried forward for use only at such other replacement unit or units.

“(g) Implementation.—The Administrator shall issue regulations to implement this section not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990.

“SEC. 510. EXCESS EMISSIONS ENFORCEMENT FEE.

“(a) Excess Emissions Enforcement Fee.—The owner or operator of any affected source that emits sulfur dioxide or nitrogen oxides for any calendar year in excess of the allowances it possesses for that calendar year (hereinafter referred to as ‘excess emissions’) shall be liable for the payment of an excess emission fee. That fee shall be equal to the excess emissions multiplied by \$2,000. The fee shall be due and payable without demand to the Administrator as provided in regulations issued by the Administrator. Any such funds shall be deposited in the United States Treasury pursuant to 31 U.S.C. 3302 (the ‘Miscellaneous Receipts Act’). Any fee due and payable under this section shall not diminish any fine, penalty or fee imposed on the same source under any other section of this Act.

“(b) Excess Emissions Offset.—The owner or operator of any affected source liable for payment of a fee under subsection (a) shall also offset the excess emissions by reducing emissions of the air pollutant concerned by an equal tonnage amount in the following calendar year, or such longer period as the Administrator may prescribe. The owner or operator of the source shall, within 60 days after the end of the year in which such excess emissions occurred, submit to the Administrator, and the State, a plan to achieve the required offsets. The Administrator shall also deduct allowances equal to the excess emissions tonnage from those issued for the source for the calendar year, or succeeding years, following the year in which the excess emissions occurred.

“(c) Fee Adjustment.—The Administrator shall, by regulation, adjust the fee specified in subsection (a) for inflation, based on the Consumer Price Index, beginning in calendar year 1996 and annually thereafter.

“(d) Prohibition.—It shall be unlawful for the owner or operator of any source liable for a fee and offset under this section to fail to pay the fee under subsection (a) or to fail to provide, and thereafter comply with, a plan as required by subsection (b), or to fail to offset excess emissions as required by subsection (b).

“(e) Savings Provision.—Nothing in this title shall limit or otherwise affect the application of section 113 or section 304.

“SEC. 511. MONITORING, REPORTING, AND RECORDKEEPING REQUIREMENTS.

“(a) Applicability.—All affected sources subject to this title shall be required to install and operate CEMS and quality assure the data for sulfur dioxide, nitrogen oxides, opacity and volumetric flow for each unit subject to this title. The Administrator shall, by regulations issued not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, specify the requirements for CEMS, for alternative methods that provide sufficiently reliable and timely information, and for recordkeeping and reporting of information from such systems. Where 2 or more units utilize a single stack, a separate

CEMS shall not be required for each unit, and for such units the regulations shall require that the owner or operator collect sufficient information to permit reliable compliance determinations for each such unit.

“(b) First Phase Requirements.—Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, the owner or operator of each unit subject to section 504 shall install and operate CEMS, quality assure the data, and keep records and report in accordance with regulations issued under subsection (a).

“(c) Second Phase Requirements.—Not later than January 1, 1995, the owner or operator of each source subject to sections 505 or 506 which has not previously met the requirements of subsection (a) shall comply with those requirements. Upon commencement of commercial operation of each new electric utility steam generating unit, the unit shall comply with the requirements of subsection (a).

“(d) Unavailability of CEMS.—If CEMS data is not available for any affected unit during any period of a calendar year in which such data is required under this title, and the owner or operator cannot provide information, satisfactory to the Administrator, on emissions during that period, the Administrator shall deem the unit to be operating in an uncontrolled manner and, by regulation, prescribe means to calculate emissions for that period. The owner or operator shall be liable for excess emissions fees and offsets under section 510 in accordance with such regulation which shall be issued not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990.

“(e) Prohibition.—It shall be unlawful for the owner or operator of any source subject to this title to operate a source without complying with the requirements of this section, and any regulations implementing this section.

“SEC. 512. COMPLIANCE WITH OTHER PROVISIONS.

(a) General.—Except as otherwise expressly provided in this Act, compliance with the requirements of this title shall not exempt or exclude the owner or operator of any source subject to this title from compliance with any other applicable requirements of this Act.

“(b) New Source Review of Compliance.—No physical change in, or change in the method of operation of, a stationary source for purposes of reducing emissions from such source in order to comply with this title shall be treated as a modification for purposes of section 111 or part C of title I of this Act if such change does not increase the potential emissions of any air pollutant from such source above the potential emissions before the change.

“SEC. 513. ENFORCEMENT.

“A violation by the owner or operator of a source subject to this title of the prohibitions of, requirements of, or regulations promulgated pursuant to, this title shall be a violation of this Act. Operation of an affected source to emit sulfur dioxide or nitrogen oxides in excess of its allowances shall be deemed a violation, with each ton emitted in excess of allowances held constituting a separate violation.

“SEC. 514. REPORT TO CONGRESS.

“Not later than January 1, 2003, the Administrator shall assess and submit a report to Congress on the environmental effects of the emission reductions under this title.

“SEC. 515. CLEAN COAL TECHNOLOGY INCENTIVES.

“(a) Revised Regulations for Clean Coal Technology Demonstrations.—The Administrator shall promulgate regulations under this section to revise requirements under section 111 and parts C and D of title I, as appropriate, to facilitate temporary and permanent clean coal demonstration projects, consistent with the attainment and maintenance of national ambient air quality standards and prevention of significant deterioration as provided in subsections (b) and (c). Such regulations shall address physical or operational changes to existing facilities for the sole purpose of installation, operation, cessation, or removal of a clean coal technology demonstration project. For the purposes of this section, a clean coal technology demonstration means—

“(1) a project using funds appropriated under the heading ‘Department of Energy–Clean Coal Technology’, or

“(2) a similar project funded through appropriations for the Environmental Protection Agency.

“(b) Temporary Projects.—Installation, operation, cessation, or removal of a temporary clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with all State implementation plans and other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated, shall not subject such facility to the requirements of section 111 or parts C or D of title I.

“(c) Permanent Projects.—Any permanent demonstration project that complies with all State implementation plans and other requirements necessary to attain and maintain the national ambient air quality standards shall not be subject to the requirements of part C or D of title I or section 111 if the projected emissions from the project will not result in an increase in emissions, relative to its predemonstration actual emissions, as determined by the Administrator, of any pollutant regulated under this Act. For purposes of calculating projected emissions for purposes of this paragraph, a 70 percent capacity factor shall be used.

“(d) Preexisting Requirements.—Any clean coal demonstration technology project shall be subject to its preexisting obligations under this Act until such time as it qualifies under regulations implementing this section for alternate requirements.

“(e) Phase I Affected Sources.—(1) A clean coal technology demonstration project defined in subsection (A)(1) of this section may use funds allocated to procurements issued subsequent to May 1, 1989, only if the project is installed at a facility owned or operated by the owner of an affected source subject to section 504(a) (relating to First Phase sulfur dioxide tonnage allowances).

“(2) A clean coal technology demonstration project defined in subsection (a)(2) of this section may be funded after enactment of the Clean Air Act amendments of 1990 only if the project is installed at a facility owned or operated by the owner or operator of an affected source subject to section 504(a) (relating to First Phase sulfur dioxide tonnage allowances).

“SEC. 516. SEVERE ENERGY SUPPLY INTERRUPTIONS AND ENERGY FUEL SUPPLY SHORTAGES.

“(a) EPA Order.—(1) The owner or operator of any unit or source required to have allowances under this title as a condition of operation may apply to the Administrator for an order under this subsection whenever, by reason of one or more of the conditions specified in subparagraph (A), (B), or (C) of paragraph (2), the total calendar year emissions of sulfur dioxide from such units and sources owned or operated by such owner or operator exceeds the allowances held by such owner or operator for that calendar year (including allowances held in reserve for contingencies). If, upon such an application, the Administrator finds, after consultation with the Secretary of Energy, that by reason of one or more of such conditions—

“(A) the ability of the owner or operator to comply with the requirements of this title has been significantly impaired,

“(B) the unit or source has emitted an amount of sulfur dioxide or oxides of nitrogen which exceeds the allowances held by the owner or operator (including allowances held in reserve for contingencies), and

“(C) the owner or operator had, before the occurrence of the condition referred to in subparagraph (A), (B), or (C) of paragraph (2), established a reasonable reserve for contingencies but that reserve did not contain sufficient allowances to cover such excess,

the Administrator shall promptly issue an order providing that allowances shall not be required to authorize such excess emissions. The Administrator shall act upon any application under this subsection in an expedited manner. Upon issuance of any such order, the emissions covered by such order in excess of the allowances held by the owner or operator shall not be treated as a violation for purposes of section 513 or for purposes of any other provision of this Act.

“(2) The conditions referred to in paragraph (1) are as follows:

“(A) A severe energy supply interruption (as defined in section 3(8) of the Energy Policy and Conservation Act) has been declared or a determination has been published by the President (including the basis of such determination) that there exists a national or regional fuel supply shortage which is, or is likely to be, of significant scope and duration and of an emergency nature and it causes or may cause a major adverse impact on public health or safety or welfare or on the economy and results, or is likely to result, from an interruption in the supply of fuel or from sabotage or an act of God.

“(B) A catastrophe has occurred that the President finds gives rise to an emergency (as defined in section 102(1) of the Disaster Relief and Emergency Assistance Act) in any part of the United States that requires an assured supply of electricity to save lives and protect property, public health and to avert or lessen the threat of a major disaster.

“(C) A catastrophe has occurred which the President finds gives rise to a major disaster (as defined in section 102(2) of the Disaster Relief and Emergency Assistance Act) in any part of the United States that requires an assured supply of electricity to alleviate the damage, loss, hardship, or suffering caused by such major disaster.

Any order under this subsection shall include such terms and conditions as the Administrator, in consultation with the Secretary of Energy, deems necessary to lessen or minimize the impact of the order consistent with the purposes of this title. The Administrator shall submit a report to Congress on all orders issued under this section. The authority of the President under this section may not be delegated to any other person.

“(b) Gas Curtailments.—Notwithstanding any emission limitation or allowance requirement applicable under this title, any electric utility steam generating unit that burned as its fuel during the period 1985 through 1987 more than 90 percent natural gas may emit during any natural gas supply emergency (as defined in title III of the Natural Gas Policy Act of 1978), sulfur dioxide at the lower of—

“(1) 0.5 lbs per million Btu, or

“(2) the most stringent rate applicable to the unit under the applicable implementation plan

if the unit burns oil during such curtailment. Notwithstanding section 505 no such unit shall be treated as a new unit required to obtain allowances under this title by reason of this subsection.

“SEC. 517. PROTECTION OF LOW-INCOME HOUSEHOLDS.

“(a) Application.—This section shall apply to each electric utility, subject to rate regulation by a State regulatory authority whose annual sales of electric energy exceed 500,000,000 kilowatt hours.

“(b) Identification of Expenditures.—Each State regulatory authority may, in accordance with the applicable procedures thereof, require each utility referred to in subsection (a) to identify, for purposes of this subsection, expenditures needed for purposes of compliance with First Phase or Second Phase of this title and to identify on an annual basis the expenditures made for such purposes within the past 12 months and the expenditures projected to be made for such purposes within the succeeding 24 months. These expenditures shall include both capitalized items and expensed items. Normal cost allocation principles shall apply where costs incurred may be related in part to other purposes or requirements. Such authority may make exceptions from the requirements of this section where the authority determines that the amount of such expenditures cannot be reasonably segregated and identified.

“(c) Treatment of Expenditures.—No utility which has identified expenditures under subsection (b) may, as determined by such authority, include in the rates and charges imposed on any income-eligible retail ratepayer any portion of the expenditures made by such utility to comply with this title. There shall be provision for notice and a public hearing on the sole issue of whether to exempt low-income residents. Any decision whether or not to exempt low-income residents and the reasons therefor must be provided to local officials. This subsection shall apply with respect to the first utility bill submitted by the utility to an income eligible ratepayer after the documentation referred to in subsection (d) is received by the utility (or after the ratepayer is found by the utility to be automatically eligible.)

“(d) Income-Eligible Retail Ratepayer.—

“(1) In general.—For purposes of this section, during any 12-month period an income-eligible retail ratepayer shall be any ratepayer of an electric utility subject to the provisions of subsection (b) who provides documentation to the utility (in such form and manner as the State regulatory authority shall, by rule, specify) satisfactory to establish that such ratepayer is an individual who is eligible at the commencement of such period for benefits under any of the following:

“(A) The Low-Income Home Energy Assistance Program (LIHEAP).

“(B) The supplemental security income program under title XVI of the Social Security Act.

“(C) Women, Infants and Children (WIC).

“(D) Food stamps.

“(E) Medical assistance under title XIX of the Social Security Act.

“(F) The Weatherization Assistance Program (WAP).

“(G) A State plan approved under section 402 of the Social Security Act (AFDC).

“(2) Apartments.—Such term also includes any ratepayer who provides documentation to the utility (in such form and manner as the State regulatory authority shall, by rule, specify) satisfactory to establish that such ratepayer leases units in a multiple unit residential dwelling to individuals if # or more of the units are occupied by individuals who, at the commencement of such period, are eligible for any of the benefits referred to above.

“(3) Automatic eligibility.—No documentation shall be required under this subsection in any case in which a ratepayer is known to the utility to be eligible for one of the types of assistance specified above.

“(4) State, local, private nonprofit organizations.—An electric utility shall accept documentation regarding any individual ratepayer under this subsection from any State, local, or private nonprofit organization which administers any of the programs referred to in paragraph (1).

“(e) Outreach.—Each utility subject to this section as provided in subsection (a) shall undertake measures, directly or through the services of low-income assistance organizations, to publicize the program under this section to the low-income community.

“(f) False Documentation.—Any person who is not an income-eligible ratepayer within the meaning of subsection (d) and who fraudulently provides false documentation to an electric utility purporting to establish that such person is an income-eligible ratepayer within the meaning of subsection (d) shall be liable to the utility for an amount equal to three times the full amount of any reduction in rates obtained by reason of such false documentation.

“SEC. 518. DOE UNITS.

“(a) Allowance Allocations for Certain Units.—In lieu of allocating allowances to the units at the Joppa, Kyger Creek, and Clifty Creek powerplants as provided in section 504 and section 505, the Administrator shall allocate and issue First Phase and Second Phase allowances pursuant to section 503 to each such unit in an amount equal to 0.4 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000.

“(b) Compliance.—The Secretary of Energy shall require that affected units at each powerplant listed in Table A of section 504(a) which provides, by contract with the Secretary of Energy, more than 75 percent of the energy generated to Federal facilities on a regular basis may only utilize, for purposes of compliance with this title, a technological system of continuous emission reduction or the purchase of allowances, or any combination of the foregoing. Subject to appropriation, the Secretary of Energy shall pay the costs of construction and installation of such system of continuous emission reduction and a share of the operating costs of such system proportional to the energy purchased by the Secretary of Energy.

“SEC. 519. AUCTION.

“(a) Early Auction.—

“(1) In general.—The Administrator, in consultation with the Secretary of the Treasury, shall conduct an auction before March 31, 1992, at which owners or operators of affected units may offer allowances for sale (hereinafter referred to as the ‘early auction’).

“(2) Documentation.—Before the early auction, the Administrator shall issue to affected units such documentation as may be necessary for the owner or operator of such units to legally transfer through such auction their rights to receive allowances and for the Administrator to record such transfers. If the Administrator fails to provide such documentation within such period, for purposes of the auction, Table A in section 504 (adjusted by the 6 percent amount referred to in section 504) shall be treated as entitling the owners or operators of the units specified in Table A to receive the allowances specified in Table A (as so adjusted) during the First Phase.

“(3) Limit on sale of second phase allowances.—No owner or operator of a unit or units for which Second Phase allowances are to be issued may sell at the early auction more than 50 percent of the allowances to be allocated to those units, based on the list of Second Phase allowances to be published by the Administrator by December 31, 1991.

“(4) Sealed offer to sell.—Owners or operators of units that elect to participate in the early auction shall specify (by a date set by the Administrator) in a sealed offer to sell: (A) the number of allowances to be offered for sale at the early auction, and (B) the minimum price at which such allowances may be sold at such auction.

“(5) Notice.—The Administrator shall publish a notice of the total number of allowances to be offered for sale at the early auction under this section.

“(6) Sealed bid schedules.—Any person may submit (by a date set by the Administrator) to the Administrator (on a sealed bid schedule provided by the Administrator) offers to purchase specified numbers of allowances at specified prices.

“(7) Sales.—The Administrator shall match the lowest offers to sell under this subsection with the highest bids submitted in the bid schedules. All allowances for which the Administrator has established a match shall be sold at the bid price.

“(8) Effect of sale at auction.—Any sale of allowances completed through the auction under this section shall constitute—

“(A) an immediate obligation by the buyer to pay to the purchaser an amount equal to the matched bid price multiplied by the total number of allowances; and

“(B) an obligation of the seller to provide the allowances subject to such bid to the purchaser.

The failure of any person to comply with such obligations shall be considered a violation punishable by the Administrator as provided in section 113(c).

“(9) Funds transferred.—No funds transferred from a purchaser to a seller of allowances under this subsection shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or to the Administrator.

“(b) Annual Allowance Auctions.—

“(1) 5 percent tap.—The Administrator shall withhold 5 percent of the allocation of allowances for each year which would (but for this subsection) be issued for each affected unit at an affected source. The Administrator shall record such withholding for purposes of transferring the proceeds of the allowance sales under this subsection. Except for the allowances reserved for sale or other distribution under subsection (c) and section 505(g) (relating to States experiencing population growth in excess of 25 percent), all allowances withheld under this paragraph shall be offered for sale by the Administrator at auctions under paragraph (2).

“(2) Annual auctions.—Commencing in June of 1993 and in June of each year thereafter, the Administrator shall conduct auctions at which the allowances referred to in paragraph (1) shall be offered for sale in accordance with regulations promulgated by the Administrator, in consultation with the Secretary of the Treasury. One-third of the allowances referred to in paragraph (1) which authorize emissions in calendar year 1996 shall be offered for sale at the auction held under this paragraph in 1993; one-third of such allowances shall be offered for sale at the auction held under this paragraph in 1994; and one-third of such allowances shall be offered for sale at the auction held under this paragraph in 1995. In 1996 and thereafter, all of the allowances referred to in paragraph (1) which authorize emissions in the next calendar year shall be offered for sale. The auction shall be open to any person. A person wishing to bid for such allowances shall submit (by a date set by the Administrator) to the Administrator (on a sealed bid schedule provided by the Administrator) offers to purchase specified numbers of allowances at specified prices. Such regulations shall allocate the auctioned allowances on the basis of bid price, starting with the highest-priced bid and continuing until all allowances for sale at such auction have been allocated. The regulations shall not permit that a minimum price be set for the purchase of withheld allowances. Allowances purchased at the auction may be used for any purpose and at any time after the auction, subject to the provisions of this title.

“(3)(A) Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, within 90 days of receipt, the Administrator shall transfer the proceeds from the auction under paragraph (2), on a pro rata basis, to the owners or operators of the affected units at an affected source from whom allowances were withheld. No funds transferred from a

purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

“(B) At the end of each year, any withheld allowances not sold at the auction shall be returned, without charge, on a pro rata basis to the owners or operators of the affected units from whose allocation the allowances were withheld. For purposes of this paragraph, for any affected unit, the term ‘pro rata basis’ refers to the ratio which the allowances allocated to that unit bears to the allowances allocated to all affected units.

“(4) Any person holding allowances not withheld under paragraph (1) which authorize emissions of sulfur dioxide for the same year as the allowances being sold at any auction under this subsection may submit those allowances to the Administrator to be offered for sale at such auction. The proceeds of any such sale shall be transferred by the purchaser to the person submitting such allowances for sale. The holder of allowances offered for sale under this paragraph may specify a minimum sale price. Any person may purchase allowances offered for auction under this paragraph. Such allowances shall be allocated to purchasers on the basis of bid price after the auction under paragraph (2) is complete. No funds transferred from a purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

“(5) The Administrator shall record and publicly report the nature, prices and results of each auction under this subsection, including the prices of successful bids, and shall record the transfers of allowances as a result of each auction in accordance with the requirements of this section. The transfer of allowances at such auction shall be recorded in accordance with the regulations promulgated by the Administrator under this section.

“(c) Special Reservations of Allowances Withheld Under Subsection (b).—

“(1) Reserves.—Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations establishing the reserves referred to in paragraphs (2), (3), (4) and section 505(g) (relating to States experiencing population growth in excess of 25 percent). A portion of the Second Phase allowances withheld under subsection (b) shall be placed in such reserves, as provided in such provisions.

“(2) Reserve for direct sale at \$1,500 per ton.—(A) In accordance with regulations under paragraph (1), the Administrator shall establish a Direct Sale Reserve containing allowances in the amount of 100,000 tons per year to be offered for sale as provided in this paragraph. Allowances in the Direct Sale Reserve shall be offered for sale at a price of \$1,500 per allowance, adjusted by the Consumer Price Index.

“(B) Requests to purchase allowances from the Direct Sale Reserve under this paragraph shall be approved in the order of receipt until no allowances remain in such Reserve, except that an opportunity to purchase such allowances shall be provided to the independent power producers referred to in section 503(l) before such allowances are offered to any other person. Each applicant shall be required to pay 50 percent of the total purchase price of the allowances within 6 months after the approval of the request to purchase. The remainder shall be paid on or before the transfer of the allowances.

“(C) If the Administrator determines that, during any period of 3 consecutive calendar years after 1997, less than 50 percent of the allowances available in the Direct Sale Reserve established under this paragraph have been purchased under this paragraph, the Administrator shall terminate the reserve and make such allowances available for auction under subsection (b)(2).

“(3) Reserve for direct sale to units in states with average emission rates below 0.9 mmbtu.—(A) In accordance with regulations under paragraph (1), the Administrator shall establish a Direct Sale Reserve containing allowances in the amount of 25,000 tons per year during the first 10 years of the Second Phase to be offered for sale as provided in this paragraph.

Allowances in the Direct Sale Reserve shall be offered for sale at a price of \$750 per allowance, adjusted by the Consumer Price Index.

“(B) Requests to purchase allowances from the Direct Sale Reserve under this paragraph shall be approved in the order of receipt until no allowances remain in such Reserve. Each applicant shall be required to pay 50 percent of the total purchase price of the allowances within 6 months after the approval of the request to purchase. The remainder shall be paid on or before the transfer of the allowances.

“(C) Only an owner or operator of a unit located in a State with a Statewide average sulfur dioxide emission for electric utility steam generating units of 0.9 lbs per mmBtu shall be eligible to purchase allowances under this paragraph.

“(D) If the Administrator determines that, during any period of 3 consecutive calendar years, less than 50 percent of the allowances available in the Direct Sale Reserve established under this paragraph have been purchased under this paragraph, the Administrator shall terminate the reserve and make such allowances available for auction under subsection (b)(2).

“(4) Reserve for distribution to certain units.—The Administrator shall reserve allowances in the amount of 62,000 tons per year from the Second Phase allowances withheld under subsection (b) for distribution under this paragraph. The Administrator shall distribute such reserved allowances to coal fired electric utility steam generating units which have 1985 sulfur dioxide emission rates less than 1.75 lbs/mmBtu and greater than 1.2 lbs/mmBtu and which are part of a utility system with a 1985 system-wide average sulfur dioxide emission rate for coal fired units of 1.5 lbs/mmBtu or less. Each such unit shall receive such allowances in a tonnage amount equal to 50 percent of the amount computed as follows: multiply 1.2 lbs/mmBtu by the amount by which the unit's fuel consumption at a 60 percent capacity factor exceeds the unit's baseline. The allowances computed under the preceding sentence shall be adjusted to ensure that the total of the allowances distributed under this paragraph is equal to 62,000. The Administrator shall reallocate to each unit any reduction or increase in the allowances to be distributed based on such adjustment on the basis of the ratio which the allowances which would (but for such adjustment) have been distributed to such unit bears to the total allowances which would (but for such adjustment) have been distributed to such units.

“(5) Proceeds.—Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, the Administrator shall require that the proceeds of any sale under this subsection be transferred, within 90 days after the sale, without charge, on a pro rata basis to the owners or operators of the affected units from whom the allowances were withheld and that any unsold allowances be returned, without charge, on a pro rata basis, to such owners or operators. No proceeds of any sale under this subsection shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or to the Administrator. For purposes of this paragraph, for any affected unit, the term ‘pro rata basis’ refers to the ratio which the allowances allocated to that unit bears to the allowances allocated to all affected units.

“SEC. 520. REGULATORY REFORMS TO REDUCE AIR EMISSIONS.

“(a) Prohibition.—No State regulated electric utility shall be eligible for interpollutant trading under section 503(c) unless the State regulatory authority exercising ratemaking authority over such utility has certified by January 1, 1995, to the Administrator that the State regulatory authority and such utility have complied with subsection (b) of this section.

“(b) State Regulatory Rulemaking—Not later than January 1, 1995—

“(1) each such utility shall undertake and complete a planning process and prepare a plan which evaluates a range of resources, including both new power supplies and energy conservation, in order to meet expected future demand at the lowest system cost and provide to such State regulatory authority such plan;

“(2) each such State regulatory authority shall review and consider each plan provided under paragraph (1) and identify and implement appropriate State regulatory mechanisms to ensure that implementation of the plan referred to in paragraph (1) is profitable to the utility; and

“(3) each such utility shall implement any plan approved by the State regulatory authority.

The State regulatory authority shall specifically identify under paragraph (2) regulatory mechanisms to ensure that utility investments in energy conservation and load management measures do not restrict or impair a utility's ability to earn its authorized rate of return.

“(c) Unregulated Utilities.—All owners or operators of affected units under Phase I whose wholesale rates are not subject to the jurisdiction of the Federal Energy Regulatory Commission or of a State regulatory authority, shall develop and implement, through a public hearing process, a least-cost plan as described in section 520(b)(1) by January 1, 1995. The plan shall be submitted to the Administrator, the Secretary of Energy, and Congress and shall be updated every 2 years.

“(d) States Choosing Not To Adopt.—If a State regulatory authority chooses not to implement the regulatory reforms under subsection (b)(2), it shall submit by January 1, 1995, to the Administrator a written statement of its determination not to implement such proposed reforms together with its reasons for not doing so.

“(e) Savings Provision.—Nothing in this section precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

“(f) Definitions.—As used in this section:

“(1) The term ‘State regulatory authority’ means any State agency which has ratemaking authority with respect to the sale of electric energy or energy services by any electric utility (other than such State agency).

“(2) The term ‘State regulated electric utility’ means any electric utility with respect to which a State regulatory authority has ratemaking authority.

“SEC. 521. EFFECT OF TITLE ON CERTAIN FEDERAL AGENCIES.

“Nothing in this title shall be construed to prohibit the Tennessee Valley Authority from receiving, retaining, and using, in accordance with other applicable law, any funds received under this title from the sale of allowances.”.

SEC. 502. NEW SOURCE PERFORMANCE STANDARDS.

(a) Repeal.—Section 111(a)(1) (42 U.S.C. 7411(a)(1)) is amended to read as follows:

“(1) The term ‘standard of performance’ means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.”.

(b) Revised Regulations.—Not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate revised regulations for standards of performance for new electric utility steam generating units commencing construction after the date on which such regulations are proposed that, at a minimum, require any source subject to such revised standards to emit any pollutants for which a standard has been promulgated pursuant to section 109

at a rate not greater than would have resulted from compliance by such source with the applicable standards of performance under this section before such revision.

(c) Applicability.—The provisions of subsections (a) and (b) apply only so long as section 503(e) of the Clean Air Act (relating to new electric utility steam generating units) remains in effect.

TITLE VI—PROVISIONS RELATING TO ENFORCEMENT

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 601. SECTION 113 ENFORCEMENT.

Section 113 is amended to read as follows:

“SEC. 113. FEDERAL ENFORCEMENT.

“(a) In General.—

“(1) Order to comply with sip requirements.—Whenever, on the basis of any information available to him, the Administrator finds that any person has violated or is in violation of any requirement of an applicable implementation plan, the Administrator shall notify the person and the State in which the plan applies of such finding. At any time after the expiration of 30 days following the date on which such notice of the violation is issued, the Administrator may, without regard to the period of violation (subject to section 2462 of title 28 of the United States Code)—

“(A) issue an order requiring such person to comply with the requirements of such plan,

“(B) issue an administrative penalty order in accordance with subsection (d), or

“(C) bring a civil action in accordance with subsection (b).

“(2) State failure to enforce sip or permit program.—Whenever, on the basis of information available to him, the Administrator finds that violations of an applicable implementation plan or an approved permit program under title IV are so widespread that such violations appear to result from a failure of the State in which the plan or permit program applies to enforce the plan or permit program effectively, he shall so notify the State. In the case of a permit program, the notice shall be made in accordance with title IV. If the Administrator finds such failure extends beyond the 30th day after such notice (90 days in the case of such permit program), he shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such plan or permit program (hereafter referred to in this section as ‘period of federally assumed enforcement’), the Administrator may enforce any requirement of such plan or permit program with respect to any person by—

“(A) issuing an order requiring such person to comply with such requirement,

“(B) issuing an administrative penalty order in accordance with subsection (d), or

“(C) bringing a civil action in accordance with subsection (b).

“(3) EPA enforcement of other requirements.—Except for a requirement enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to him, the Administrator finds that any person has violated, or is in violation of, any requirement of section 111(e) of this title (relating to new source performance standards), section

112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 402(a) or 403(c) of title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) (including a requirement of any rule, order, waiver, or permit promulgated or approved under any provision of such sections or titles and including any requirement for the payment of any fee owed to the United States under this Act), the Administrator may—

“(A) issue an administrative penalty order in accordance with subsection (d),

“(B) issue an order requiring such person to comply with such requirement,

“(C) bring a civil action in accordance with subsection (b) or section 305, or

“(D) request the Attorney General to commence a criminal action in accordance with subsection (c).

“(4) Requirements for orders.—An order issued under this subsection (other than an order relating to a violation of section 112) shall not take effect until the person to whom it is issued has had an opportunity to confer with the Administrator concerning the alleged violation. A copy of any order issued under this subsection shall be sent to the State air pollution control agency of any State in which the violation occurs. Any order issued under this subsection shall state with reasonable specificity the nature of the violation, specify a time for compliance which the Administrator determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. In any case in which an order under this subsection (or notice to a violator under paragraph (1)) is issued to a corporation, a copy of such order (or notice) shall be issued to appropriate corporate officers. An order issued under this subsection shall require the person to whom it was issued to comply with the requirement as expeditiously as practicable, but in no event longer than one year after the date the order was issued, and shall be nonrenewable. No order issued under this subsection shall prevent the State or the Administrator from assessing any penalties nor otherwise affect or limit the State or the United States' authority to enforce under other provisions of this Act, nor affect any person's obligations to comply with any section of this Act or with a term or condition of any permit or applicable implementation plan promulgated or approved under this Act.

“(5) Failure to comply with part c or part d of title i.—Whenever, on the basis of information available to him, the Administrator finds that a State is not acting in compliance with any requirement of part C or part D of title I, he may—

“(A) issue an order prohibiting the construction or modification of any major stationary source in any area to which such requirement applies;

“(B) issue an administrative penalty order in accordance with subsection (d), or

“(C) bring a civil action under subsection (b)(5).

“(b) Civil Judicial Enforcement.—The Administrator shall, as appropriate, in the case of any person which is the owner or operator of an affected source, a major emitting facility, or a major stationary source, and may, in the case of any other person, commence a civil action for a permanent or temporary injunction, or to assess and recover a civil penalty of not more than \$25,000 per day for each violation, or both, in any of the following instances:

“(1) Whenever such person violates any requirement of an applicable implementation plan as provided in subsection (a). Such an action shall be commenced (A) during any period of federally assumed enforcement, or (B) more than 30 days following the date of the Administrator's notification under subsection (a)(1) that such person is violating such requirement.

“(2) Whenever such person violates any requirement of section 111(e) of this title (relating to new source performance standards), section 112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this

title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) (including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under any such provision.

“(3) Whenever such person attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) has been made.

Any action under this subsection may be brought in the district court of the United States in which the violation is alleged to have occurred or in which the defendant resides or has his principal place of business, and such court shall have jurisdiction to restrain such violation, to require compliance, to assess such civil penalty, to collect any fees owed the United States and any noncompliance assessment and nonpayment penalty owed under section 120 and to award any other appropriate relief. Notice of the commencement of such action shall be given to the appropriate State air pollution control agency. In the case of any action brought by the Administrator under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to the party or parties against whom such action was brought in any case where the court finds that such action was unreasonable.

“(c) Criminal Penalties.—(1) Any person who knowingly violates any requirement of section 111(e) of this title (relating to new source performance standards), section 112(h) of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) of title IV (relating to permits), or any prohibition of title V (relating to acid deposition control), (including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under this Act) shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not to exceed 5 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

“(2) Any person who knowingly—

“(A) makes any false statement, representation, or certification in, or omits material information from or knowingly alters, conceals, or fails to maintain or file, any notice, application, record, report, plan, or other document filed or required to be filed, maintained, or used for purposes of compliance with this Act (whether with respect to the requirements imposed by the Administrator or by a State);

“(B) fails to notify or report as required under this Act; or

“(C) falsifies, tampers with, or renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under this Act

shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both.

“(3) Any person who knowingly fails to pay any fee owed the United States under title I, III, IV, or shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 1 year, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

“(4) Any person who negligently releases into the ambient air any hazardous air pollutant listed pursuant to section 112 or any extremely hazardous substance listed pursuant to section 302(a)(2) of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11002(a)(2)) that is not listed in section 112, and who at the time negligently places another person in imminent danger of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 of the United States Code, or by imprisonment for not more than 1 year, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

“(5)(A) Any person who knowingly releases into the ambient air any hazardous air pollutant listed pursuant to section 112 or any extremely hazardous substance listed pursuant to section 302(a)(2) of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11002(a)(2)) that is not listed in section 112, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 of the United States Code, or by imprisonment of not more than 15 years, or both. Any person committing such violation which is an organization shall, upon conviction under this paragraph, be subject to a fine of not more than \$1,000,000 for each violation. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment. For any air pollutant for which the Administrator has set an emissions standard or for any source for which a permit has been issued under title IV, a release of such pollutant in accordance with that standard or permit shall not constitute a violation of this paragraph or paragraph (4).

“(B) In determining whether a defendant who is an individual knew that the violation placed another person in imminent danger of death or serious bodily injury—

“(i) the defendant is responsible only for actual awareness or actual belief possessed; and

“(ii) knowledge possessed by a person other than the defendant, but not by the defendant, may not be attributed to the defendant;

except that in proving a defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to be shielded from relevant information.

“(C) It is an affirmative defense to a prosecution that the conduct charged was freely consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of—

“(i) an occupation, a business, or a profession; or

“(ii) medical treatment or medical or scientific experimentation conducted by professionally approved methods and such other person had been made aware of the risks involved prior to giving consent.

The defendant may establish an affirmative defense under this subparagraph by a preponderance of the evidence.

“(D) The term ‘organization’ means a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons.

“(E) The term ‘serious bodily injury’ means bodily injury which involves a substantial risk of death, unconsciousness, extreme physical pain, protracted and obvious disfigurement or protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

“(6) For the purpose of this subsection, the term ‘person’ includes, in addition to the entities referred to in section 302(e), any responsible corporate officer.

“(d) Administrative Assessment of Civil Penalties.—(1) The Administrator may issue an administrative order against any person assessing a civil administrative penalty of up to \$25,000, per day of violation, whenever, on the basis of any available information, the Administrator finds that such person—

“(A) violates any requirement of an applicable implementation plan (such order shall be issued (i) during any period of federally assumed enforcement, or (ii) more than thirty days following the date of the Administrator's notification under subsection (a)(1) of this section of a finding that such person is violating such requirement); or

“(B) violates any other requirement of section 111(e) of this title (relating to new source performance standards), section 112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under this Act; or

“(C) attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) of this section has been made.

The Administrator's authority under this paragraph shall be limited to matters where the total penalty sought does not exceed \$200,000 and the first alleged date of violation occurred no more than 12 months prior to the initiation of the administrative action, except where the Administrator and the Attorney General jointly determine that a matter involving a larger penalty amount or longer period of violation is appropriate for administrative penalty action. Any such determination by the Administrator and the Attorney General shall not be subject to judicial review.

“(2)(A) An administrative penalty assessed under paragraph (1) shall be assessed by the Administrator by an order made on the record after opportunity for a hearing in accordance with sections 554 and 556 of title 5 of the United States Code. The Administrator shall issue reasonable rules for discovery and other procedures for hearings under this paragraph. Before issuing such an order, the Administrator shall give written notice to the person to be assessed an administrative penalty of the Administrator's proposal to issue such order and provide such person an opportunity to request such a hearing on the order, within 30 days of the date the notice is received by such person.

“(B) The Administrator may compromise, modify, or remit, with or without conditions, any administrative penalty which may be imposed under this subsection.

“(3) The Administrator may implement, after consultation with the Attorney General and the States, a field citation program through regulations establishing appropriate minor violations for which field citations assessing civil penalties not to exceed \$5,000 per day of violation may be issued by officers or employees designated by the Administrator. Any person to whom a field citation is assessed may, within a reasonable time as prescribed by the Administrator through regulation, elect to pay the penalty assessment or to request a hearing on the field citation. If a request for a hearing is not made within the time specified in the regulation, the penalty assessment in the field citation shall be final. Such hearing shall not be subject to section 554 or 556 of title 5 of the United States Code, but shall provide a reasonable opportunity to be heard and to present evidence. Payment of a civil penalty required by a field citation shall not be a defense to further enforcement by the United States or a State to correct a violation, or to assess the statutory maximum penalty pursuant to other authorities in the Act, if the violation continues.

“(4) Any person against whom a civil penalty is assessed by the Administrator under this subsection may seek review of such assessment in the United States District Court for the District of Columbia or for the district in which the violation is alleged to have occurred, in which such person resides, or where such person's principal place of business is located, within 30 days following the date the civil penalty order is issued under paragraph (2), or the final decision in a hearing under paragraph (3) is rendered, and by simultaneously sending a copy of the filing by certified mail to the Administrator and the Attorney General. The Administrator or Attorney General, as appropriate, shall promptly file in such court a certified copy, or certified index, as appropriate, of the record on which the order or final decision was issued within 30 days. Such court, in the case of an assessment under paragraph (2), shall not set aside or remand such order or final decision unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Administrator's assessment of the penalty constitutes an abuse of discretion. In any such proceedings, the United States may seek to recover civil penalties assessed under this section.

“(5) If any person fails to pay an assessment of a civil penalty—

“(A) after the order making the assessment or field citation has become final, or

“(B) after a court in an action brought under paragraph (4) has entered a final judgment in favor of the Administrator,

the Administrator shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed (plus interest at rates established pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986 from the date of the final order or decision or the date of the final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any person who fails to pay on a timely basis a civil penalty under this section shall be required to pay, in addition to such penalty and interest, the United States' enforcement expenses, including but not limited to attorneys fees and costs incurred by the United States for collection proceedings.

“(e) Penalty Assessment Criteria.—(1) In determining the amount of any penalty to be assessed under this section or section 304(a), the Administrator or the court, as appropriate, shall take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

“(2) A penalty may be assessed for each day of violation. For purposes of determining the number of days of violation for which a penalty may be assessed under this section or section 304(a), or an assessment may be made under section 120, the violation shall be deemed to commence on the first provable date of violation and to continue each and every day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by a preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

“(f) Rewards.—The Administrator may pay a reward, not to exceed \$10,000, to any person who furnishes information or services which lead to a criminal conviction or a judicial or administrative civil penalty for any violation of titles I, III, IV, or V of this Act enforced under this section. Such payment is subject to available appropriations for such purposes as provided in annual appropriation Acts. Any officer, or employee of the United States or any State or local government who furnishes information or renders service in the performance of an official duty is ineligible for payment under this subsection. The Administrator may, by regulation, prescribe additional criteria for eligibility for such a reward.

“(g) Settlements; Public Participation.—At least 30 days before a consent order or settlement agreement of any kind under this Act (other than enforcement actions under section 113, 120, or title II, whether or not involving civil or criminal penalties, or judgments subject to Department of Justice policy on public participation) is final or filed with a court, the Administrator

shall provide a reasonable opportunity by notice in the Federal Register to persons who are not named as parties or intervenors to the action or matter to comment in writing. The Administrator or the Attorney General, as appropriate, shall promptly consider any such written comments and may withdraw or withhold his consent to the proposed order or agreement if the comments disclose facts or considerations which indicate that is inappropriate, improper, inadequate, or inconsistent with the requirements of this Act. Nothing in this subsection shall apply to civil or criminal penalties under this Act.”.

SEC. 602. COMPLIANCE CERTIFICATION.

(a) Records, Reports, Monitoring, Etc.—Section 114(a)(1) is amended to read as follows:

“(1) the Administrator may require any person who owns or operates any emission source, who manufactures emission control equipment or process equipment, who the Administrator believes may have information necessary for the purposes set forth in this subsection, or who is subject to any requirement of this Act (other than a manufacturer subject to the provisions of section 206(c) or 208 with respect to a provision of title II) on a one-time, periodic or continuous basis to—

“(A) establish and maintain such records;

“(B) make such reports;

“(C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods;

“(D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods and in such manner as the Administrator shall prescribe);

“(E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical;

“(F) submit compliance certifications in accordance with section 114(a)(3); and

“(G) provide such other information, as he may reasonably require; and”.

(b) Monitoring and Compliance Certifications.—Section 114(a) is amended by adding the following new paragraph at the end:

“(3) The Administrator shall in the case of any person which is the owner or operator of a major stationary source, and may, in the case of any other person, require enhanced monitoring and submission of compliance certifications. Compliance certifications shall include (A) identification of the applicable requirement that is the basis of the certification, (B) the method used for determining the compliance status of the source, (C) the compliance status, (D) whether compliance is continuous or intermittent, (E) such other facts as the Administrator may require. Compliance certifications and monitoring data shall be public information. Nothing in this paragraph shall be construed as requiring disclosure of information subject to exemption from disclosure under subsection (c) of this section as trade secrets or that is subject to applicable law concerning self-incrimination. Submission of a compliance certification shall in no way limit the Administrator's authorities to investigate or otherwise implement this Act.”.

(c) Judicial Review.—Section 307(b)(1) is amended by inserting “or revising regulations for enhanced monitoring and compliance certification programs under section 114(a)(3) of this Act,” immediately before “or any other final action of the Administrator”.

SEC. 603. ADMINISTRATIVE ENFORCEMENT SUBPOENAS.

Section 307(a) is amended by striking out “(1)” after “(a)” and by striking “or section 202(b)(5)” and immediately after “section 202(b)(4) or 211(c)(3)” inserting “, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under section 113, section 114, section 120, section 205, section 206, section 208, section 303 or section 306”.

SEC. 604. ENFORCEMENT OF ADMINISTRATIVE ORDERS.

Section 303 is amended by striking “(a)” and by striking out subsection (b).

SEC. 605. SCOPE OF EMERGENCY ORDERS.

Section 303 of the Clean Air Act, as amended by section 604 of this Act, is further amended as follows:

(1) Strike “the health of persons,” and insert “public health or welfare, or the environment” and after the words “abate such sources” insert “or have not acted adequately to abate such sources”.

(2) Amend the second sentence to read “If it is not practicable to assure prompt protection of public health or welfare or the environment by commencement of such a civil action, the Administrator may issue such orders as may be necessary to protect public health or welfare or the environment.”.

(3) Strike the last 2 sentences in their entirety.

SEC. 606. CONTRACTOR LISTINGS.

Section 306(a) is amended as follows:

(1) Strike “113(c)(1)” and insert “113(c), 205(d), 211(d)(3), and 212(e)”.

(2) Insert at the end thereof: “For convictions arising under section 113(c)(2), the condition giving rise to the conviction also shall be considered to include any substantive violation of this Act associated with the violation of 113(c)(2). The Administrator may extend this prohibition to other facilities owned or operated by the convicted person.”.

SEC. 607. JUDICIAL REVIEW PENDING RECONSIDERATION OF REGULATION.

Section 307(b)(1) is amended by adding at the end thereof: “The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.”.

SEC. 608. CITIZEN SUITS.

(a) Civil Penalties.—Section 304(a) is amended by inserting immediately before the period at the end thereof: “, and to apply any appropriate civil penalties (except for actions under paragraph (2))”.

(b) Penalty Fund.—Section 304 is amended by adding the following new subsection after subsection (f):

“(g) Penalty Fund.—Penalties received under subsection (a) shall be deposited in a special fund in the United States Treasury for licensing and other services. Amounts in such fund and authorized to be appropriated shall remain available until expended, for use by the Administrator to finance air compliance and enforcement activities. The Administrator shall annually report to the Congress about the sums deposited into the fund, the sources thereof, and the actual and proposed uses thereof.”

(c) Intervention by EPA.—Paragraph (2) of section 304(c) is amended to read as follows:

“(2) In any action under this section, the Administrator, if not a party, may intervene as a matter of right at any time in the proceeding. A judgment in an action under this section to which the United States is not a party shall not, however, have any binding effect upon the United States.”

(d) Service of Complaint; Consent Judgments.—Section 304(c) is amended by adding the following new paragraph after paragraph (2):

“(3) Whenever any action is brought under this section the plaintiff shall serve a copy of the complaint on the Attorney General of the United States and on the Administrator. No consent judgment shall be entered in an action brought under this section in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the Attorney General and the Administrator during which time the Government may submit its comments on the proposed consent judgment to the court and parties or may intervene as a matter of right.”

SEC. 609. ENHANCED IMPLEMENTATION AND ENFORCEMENT OF NEW SOURCE REVIEW REQUIREMENTS.

Section 167 is amended by striking “the construction of a major emitting facility” and inserting “the construction or modification of a major emitting facility”.

SEC. 610. MOVABLE STATIONARY SOURCES.

Section 302 is amended by adding the following subsection at the end thereof:

“(z) Stationary Source.—The term ‘stationary source’ means generally any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 216.”

SEC. 611. ENFORCEMENT OF NEW TITLES OF THE ACT.

Section 120(a)(2)(A) is amended as follows:

(1) Insert “, 167, 303,” after “111” in clause (ii).

(2) Redesignate clause (iii) as (iv) and in new clause (iv) strike “clause (i) or (ii)”, and insert “clause (i), (ii), or (iii)”.

(3) Insert the following new clause after clause (ii)

“(iii) a stationary source which is not in compliance with any requirement of title IV, V or VII of this Act, or”.

TITLE VII—MISCELLANEOUS PROVISIONS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 701. GRANTS FOR SUPPORT OF AIR POLLUTION PLANNING AND CONTROL PROGRAMS.

(a) Grants.—Subparagraphs (A) and (B) of section 105(a)(1) are amended to read as follows:

“(A) The Administrator may make grants to air pollution control agencies, within the meaning of paragraph (1), (2), (3), (4), or (5) of section 302, in an amount up to three-fifths of the cost of implementing programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards. For the purpose of this section, ‘implementing’ means any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs.

“(B) Subject to subsections (b) and (c) of this section, an air pollution control agency which receives a grant under subparagraph (A) which contributes less than the required two-fifths minimum shall have 3 years following the date of the enactment of the Clean Air Act Amendments of 1990 in which to contribute such amount. If such an agency fails to meet and maintain this required level, the Administrator shall reduce the amount of the Federal contribution accordingly.”.

(b) Conforming Amendment.—Section 105(a)(1)(C) is amended by striking “(B)” and inserting “(A)”.

(c) Limitation on Grants.—Section 105(b) is amended by—

(1) inserting “(1)” immediately after “(b)”

(2) striking all that follows “(3) the financial need of the respective agencies.”; and

(3) redesignating paragraphs (1), (2), and (3) as subparagraphs (A), (B), and (C) respectively.

(d) Limitation.—Section 105 is amended by redesignating subsection (c) as paragraph (2) of subsection (b) and by striking all that follows “into which such area extends.” in the newly designated paragraph (2) and inserting “Subject to the provisions of paragraph (1) of this subsection, no State shall have made available to it for application less than one-half of 1 per centum of the annual appropriation for grants under this section for grants to agencies within such State.”.

(e) Maintenance of Effort.—Section 105 is amended by inserting the following new subsection after subsection (b):

“(c) Maintenance of Effort.—(1) No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for recurrent expenditures for air pollution control programs will be less than its expenditures were for such programs during the preceding fiscal year. In order for the Administrator to award grants under this section in a timely manner each fiscal year, the Administrator shall compare an agency's prospective expenditure level to that of its second preceding fiscal year. The Administrator shall revise the current regulations which define applicable nonrecurrent and recurrent expenditures, and in so doing, give due consideration to exempting an agency from the limitations of this paragraph and subsection (a) due to periodic increases experienced by that agency from time to time in its annual expenditures for purposes acceptable to the Administrator for that fiscal year.

“(2) The Administrator may still award a grant to an agency not meeting the requirements of paragraph (1) of this subsection if the Administrator, after notice and opportunity for public hearing, determines that a reduction in expenditures is attributable to a non-selective reduction in the expenditures in the programs of all Executive branch agencies of the applicable unit of Government. No agency shall receive any grant under this section with respect to the maintenance of a program for the prevention and control of air pollution unless the Administrator is satisfied that such a grant will be so used to supplement and, to the extent practicable, increase the level of State, local, or other non-Federal funds. No grants shall be made under

this section until the Administrator has consulted with the appropriate official as designated by the Governor or Governors of the State or States affected.”.

(f) Costs.—Section 106 is amended by striking “three-fourths of the air quality planning program costs of such agency” and inserting “three-fifths of the air quality implementation program costs of such agency”.

SEC. 702. ANNUAL REPORT REPEAL.

Section 313 is repealed.

SEC. 703. REVIEW AND REVISION OF CRITERIA AND STANDARDS.

(a) Review and Revision of Criteria.—Section 109(d)(1) is amended to read as follows: “(1)(A) Not later than 5 years after enactment of the Clean Air Act Amendments of 1990 and thereafter as provided in subparagraph (C), the Administrator shall (i) complete a review of the criteria published under section 108 and the standards promulgated under this section (ii) make such revisions in the criteria as may be appropriate to reflect advances in scientific knowledge, and (iii) determine whether it is appropriate to propose revisions of the standards based on the applicable criteria. In making revisions or determinations under this subparagraph, the Administrator may use such procedures as the Administrator deems appropriate. Notice of revisions and determinations made under this subparagraph shall be published in the Federal Register not later than 30 days after the revisions or determinations, respectively, are made, and copies shall be made available to the general public.

“(B) If the Administrator determines under subparagraph (A) that it is appropriate to propose revision of a standard, the Administrator shall commence rulemaking proceedings under section 307(d) and make such revisions as are appropriate as expeditiously as practicable but not later than 3 years after such determination is made. The Administrator may elect to follow the same procedure with respect to a determination that it is inappropriate to propose a revision of a standard.

“(C) After the first review and (as appropriate) revision of a standard under this paragraph, the Administrator shall repeat the process specified in subparagraphs (A) and (B) from time to time for such standard. The review specified in subparagraph (A) shall be completed not later than 5 years after completion of the last review of the standard or, if the standard was revised as a result of such review (or judicial review), not later than 5 years after completion of such revision. For any new standard promulgated after the date of the enactment of the Clean Air Act Amendments of 1990, the first review under subparagraph (A) shall be completed not later than 5 years after the date of promulgation.

“(D) A determination under subparagraph (A) that it is inappropriate to propose a revision of a standard shall be reviewable as a final action under section 307(b). If the Administrator elects to commence rulemaking proceedings under subparagraph (B) with respect to such a determination, the determination shall be reviewable only upon completion of the rulemaking. A determination under subparagraph (A) that it is appropriate to propose revision of a standard shall not be subject to judicial review under section 307(b) or otherwise.

“(E) The Administrator may review and revise criteria or standards earlier or more frequently than required under this paragraph.”.

(b) Conforming Amendment.—Section 109(d)(2)(B) is amended by striking “January 1, 1980, and at five-year intervals thereafter,” and inserting “5 years after the date of the enactment of the Clean Air Act Amendments of 1990 and thereafter at intervals corresponding to the Administrator’s review of criteria and standards under paragraph (1).”.

(c) Issuance of Air Quality Criteria.—Section 108(a)(2) is amended by striking “12 months” and inserting “3 years”.

(d) Conforming Amendment.—Section 108(c) is amended by striking “criteria or” in the first sentence.

(e) Promulgation.—Section 109(a)(2) is amended by striking “the Administrator shall” and all that follows down through the period at the end of such paragraphs and inserting “the Administrator shall promulgate proposed national primary and secondary ambient air quality standards as appropriate for such air pollutant not later than 3 years after such issuance. The procedure provided for in subsection (d) shall apply to the revision of such standards.”.

(f) Revision of Standards.—Section 109(b) is amended by striking the second sentence of paragraph (1) and the second sentence of paragraph (2).

SEC. 704. AIR POLLUTANT RELEASE INVESTIGATION BOARD.

Add the following new section after section 193:

“SEC. 194. AIR POLLUTANT RELEASE INVESTIGATION BOARD.

“(a) Establishment.—There is established within the Environmental Protection Agency an Air Pollutant Accidental Release Investigation Board to be appointed by the Administrator for the purpose of investigating major life-threatening releases of air pollutants. The Board shall consist of 3 members which serve at the pleasure of the Administrator. The Board shall establish reasonable rules of procedure.

“(b) Membership.—The Board shall establish panels to investigate such releases. Any panel of the Board shall consist of 4 employees of the United States Environmental Protection Agency and the Secretary of Labor selected jointly by the Administrator and the Secretary of Labor at the request of the Board. With the consent of the head of any other Federal agency, the Administrator may also select an employee of such agency as a member of a panel in place of an employee of the Environmental Protection Agency.

“(c) Duties.—(1) The Board shall investigate or cause to be investigated (in such detail as it shall prescribe), and independently determine the facts, conditions, and circumstances and the cause or probable cause or causes of, any major life-threatening release of an air pollutant, except:

“(A) any release of source, byproduct, or special nuclear material from a nuclear incident which the Nuclear Regulatory Commission is authorized to investigate, and

“(B) any transportation-related release, including marine oil spills, which the National Transportation Safety Board (NTSB) is authorized to investigate.

The Board should utilize the expertise and experience of other agencies, including the NTSB.

“(2) For any investigation performed under paragraph (1) of this subsection, the Board shall develop a written report on the facts, conditions, and circumstances of the release and include appropriate recommendations and shall make such reports available to the Administrator, the Secretary of Labor, and Congress and available to the public. No proposed or final report of the Board shall be subject to review of the Administrator or any agency or to judicial review in any court.

“(d) Powers.—(1) The Board, or upon the authority of the Board, any member thereof, may, for the purpose of carrying out subsection (c), hold such hearings, sit and act at such times and places, and administer such oaths, as the Board or such officer or employee deems advisable.

“(2) In addition to that described in paragraph (1), the Board may use any information gathering authority of the Administrator under this Act, including the subpoena power provided in section 307(a)(1) of this Act.

“(e) Evidence.—No part of the conclusions, findings, or recommendations of any report of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages in which the United States is a party arising out of any matter mentioned in such report.”.

SEC. 705. EMISSION FACTORS.

Part A of title I, as amended by section 108(g) of the Act, is amended by adding the following new section at the end thereof:

“SEC. 130. EMISSION FACTORS.

“Within 6 months after enactment of the Clean Air Act Amendments of 1990, and at least every 3 years thereafter, the Administrator shall review and, if necessary, revise, the methods (‘emission factors’) used for purposes of this Act to estimate the quantity of emissions of carbon monoxide, volatile organic compounds, and oxides of nitrogen from sources of such air pollutants (including area sources and mobile sources). In addition, the Administrator shall establish emission factors for sources for which no such methods have previously been established by the Administrator. The Administrator shall permit any person to demonstrate improved emissions estimating techniques, and following approval of such techniques, the Administrator shall authorize the use of such techniques. Any such technique may be approved only after appropriate public participation. Until the Administrator has completed the revision required by this section, nothing in this section shall be construed to affect the validity of emission factors established by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990.”.

SEC. 706. LAND USE AUTHORITY.

Part A of title I, is amended by section 706 of this Act, is amended by adding the following at the end thereof:

“SEC. 131. LAND USE AUTHORITY.

“Nothing in this Act constitutes an infringement on the existing authority of counties and cities to plan or control land use, and nothing in this Act provides or transfers authority over such land use.”.

SEC. 707. VIRGIN ISLANDS.

Section 324(a)(1) (42 U.S.C. 7625-I(a)(1)) is amended by inserting “the Virgin Islands,” after “American Samoa,”.

SEC. 708. AUTHORIZATION.

Section 327 is amended to read as follows:

“SEC. 327. AUTHORIZATION OF APPROPRIATIONS.

“There are authorized to be appropriated to carry out this Act such sums as may be necessary.”.

TITLE VIII—OTHER PROVISIONS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 801. ESTABLISHMENT OF PROGRAM TO MONITOR AND IMPROVE AIR QUALITY IN REGIONS ALONG THE BORDER BETWEEN THE UNITED STATES AND THE UNITED STATES OF MEXICO.

(a) In General.—The Administrator of the Environmental Protection Agency (hereinafter referred to as the “Administrator”) is authorized, in cooperation with the Department of State and the affected States, to negotiate with representatives of the United States of Mexico to establish a program to monitor and improve air quality in regions directly along the border between the United States and the United States of Mexico. The program established under this section shall be conducted for a period of 60 months beginning on July 1, 1990.

(b) Monitoring and Remediation.—

(1) Monitoring.—The monitoring component of the program conducted under this section shall identify and determine sources of pollutants for which National ambient air quality standards (hereinafter referred to as “NAAQS”) and other air quality goals have been established in regions along the border between the United States and the United States of Mexico. Such monitoring component of the program shall include, but not be limited to, the collection of meteorological data, the measurement of air quality, the compilation of an emissions inventory, and shall be sufficient to the extent necessary to successfully support the use of a state-of-the-art mathematical air modeling analysis. Such monitoring component of the program shall collect and produce data projecting the level of emission reductions necessary in both the United States of Mexico and the United States to bring about attainment of both primary and secondary NAAQS, and other air quality goals, in regions along the border in the United States. Such monitoring component of the program shall include to the extent possible, data from monitoring programs undertaken by other parties.

(2) Remediation.—The Administrator, in cooperation with the Department of State is authorized to negotiate with appropriate representatives of the United States of Mexico to develop joint remediation measures to reduce the level of airborne pollutants to achieve and maintain primary and secondary NAAQS, and other air quality goals, in regions along the border between the United States and the United States of Mexico. Such joint remediation measures may include, but not be limited to measures included in the Environmental Protection Agency's Control Techniques and Control Technology documents. Such remediation program shall also identify those control measures implementation of which in the United States of Mexico would be expedited by the use of material and financial assistance of the United States. With respect to those control measures identified as requiring funding of the United States for projects within the United States of Mexico, the Administrator shall attempt to the maximum extent practicable to utilize resources of the United States of Mexico that would offset costs of the United States in implementing joint remediation measures under this section. Such joint remediation measures shall be included as enforceable control strategies in the state implementation plan for the respective nonattainment area.

(c) Study and Reports.—

(1) GAO study.—The Comptroller General of the General Accounting Office shall, conduct a study and issue a report to Congress not later than January 1, 1994, on the program conducted under this section. Such study shall—

(A) summarize the project to date,

(B) make recommendations on ways to improve the program; and

(C) make recommendations on the advisability of continuing the program or expanding the program to include Canada and other nations.

(2) Report of administrator.—The Administrator shall, not later than July 1, 1991, and each year thereafter during the operation of the program described in this section, report to Congress on the progress of the program in bringing nonattainment areas along the border of the United States into attainment with primary and secondary NAAQS. The report issued by the Administrator under this paragraph shall include recommendations on funding mechanisms to assist in implementation of monitoring and remediation efforts.

(d) Funding and Personnel.—The Administrator shall, where necessary, make available, subject to appropriation Acts, such funds, personnel, and equipment as may be necessary to implement the provisions of this section. In those cases where direct financial assistance of the United States is provided to implement monitoring and remediation programs in the United States of Mexico, the Administrator shall develop grant agreements with appropriate representatives of the United States of Mexico to assure the accuracy and completeness of monitoring data and the performance of remediation measures which are financed by the United States. Such funding agreements, subject to appropriation Acts, shall include authorization for the Administrator to—

(1) review and agree to plans for monitoring and remediation;

(2) inspect premises, equipment and records to insure compliance with the agreements established under and the purposes set forth in this section; and

(3) where necessary, develop grant agreements with affected States to carry out the provisions of the section.

(e) Consideration of Factors in Nonattainment Areas.—When approving state implementation plans for nonattainment areas (as defined in section 171(2) (42 U.S.C. 7501(2)) , the Administrator shall take into account the impacts of the sources of pollutants coming from the United States of Mexico and the role of the United States in developing monitoring and remediation plans with the United States of Mexico to bring about attainment of both primary and secondary NAAQS and other air quality goals in regions along the border in the United States.

SEC. 802. EQUIVALENT AIR QUALITY CONTROLS AMONG TRADING NATIONS.

(a) Findings.—The Congress finds that—

(1) all nations have the responsibility to adopt and enforce effective air quality standards and requirements and the United States, in enacting this Act, is carrying out its responsibility in this regard;

(2) as a result of complying with this Act, businesses in the United States will make significant capital investments and incur incremental costs in implementing control technology standards;

(3) such compliance may impair the competitiveness of certain United States jobs, production, processes, and products if foreign goods are produced under less costly environmental standards and requirements than are United States goods; and

(4) mechanisms should be sought through which the United States and its trading partners can agree to eliminate or reduce competitive disadvantages.

(b) Action by the President.—

(1) In general.—Within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the President shall submit to the Congress a report—

(A) identifying and evaluating the economic effects of—

(i) the significant air quality standards and controls required under this Act, and
 (ii) the differences between the significant standards and controls required under this Act and similar standards and controls adopted and enforced by the major trading partners of the United States, on the international competitiveness of United States manufacturers; and

(B) containing a strategy for addressing such economic effects through trade consultations and negotiations.

(2) Additional reporting requirements.—(A) The evaluation required under paragraph (1)(A) shall examine the extent to which the significant air quality standards and controls required under this Act are comparable to existing internationally-agreed norms.

(B) The strategy required to be developed under paragraph (1)(B) shall include recommended options (such as the harmonization of standards and trade adjustment measures) for reducing or eliminating competitive disadvantages caused by differences in standards and controls between the United States and each of its major trading partners.

(3) Public comment.—Interested parties shall be given an opportunity to submit comments regarding the evaluations and strategy required in the report under paragraph (1). The President shall take any such comment into account in preparing the report.

(4) Interim Report.—Within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, the President shall submit to the Congress an interim report on the progress being made in complying with paragraph (1).

SEC. 803. REPORT ON COSTS AND BENEFITS.

Commencing on the second year after the date of the enactment of the Clean Air Act Amendments of 1990 and annually thereafter, the Comptroller General of the General Accounting Office, in consultation with other agencies, such as the Environmental Protection Agency, the Department of Labor, the Department of Commerce, the United States Trade Representative, the National Academy of Sciences, the Office of Technology Assessment, the National Academy of Engineering, the Council on Environmental Quality, and the Surgeon General, shall provide a report to the Congress on the incremental human health and environmental benefits, and incremental costs beyond current clean air requirements of the new control strategies and technologies required by this Act. The report shall include, for such strategies and technologies, an analysis of the actual emissions reductions beyond existing practice, the effects on human life, human health and the environment (including both positive impacts and those that may be detrimental to jobs and communities resulting from loss of employers and employment, etc.), the energy security impacts, and the effect on United States products and our industrial competitiveness in national and international markets.

SEC. 804. UNITED STATES-MEXICO OFFICE WITHIN EPA.

Title III is amended by inserting the following after section 325:

“SEC. 325A. UNITED STATES-MEXICO AIR QUALITY.

“(a) Establishment of Office.—In coordination with the Secretary of State, the Administrator shall establish in the Office of International Activities a United States-Mexico Air Quality Office to be under the direction of a Director for United-States-Mexico Air Quality affairs (hereinafter in this section referred to as the Director).

“(b) Duties of Director.—In addition to such other air quality duties as may be delegated to the Director, the Director shall have the responsibility to carry out each of the following:

“(1) A binational study of the prospects in Mexico for clean fuel automobiles and clean fuels (especially natural gas given Mexico's competitive advantage in this area).

“(2) A study on the possibility of standardized regulations between the United States and Mexico on air quality to contribute to greater coordination between the two jurisdictions.

PURPOSE AND SUMMARY

The purpose of the bill is to strengthen and expand the Clean Air Act to facilitate attainment of the health-based primary National Ambient Air Quality Standards (NAAQS) in our urban areas, provide an accelerated, technology-based air toxic program, provide a new alternative fuels program, establish a market-based acid rain reduction program, provide improved enforcement, and make a number of other changes, all aimed at improving air quality.

NEED FOR LEGISLATION

The goal of the Clean Air Act is to “protect and enhance the quality of the Nation's air resources.” It was last amended in 1977. Since that time, many of the Nation's most important air pollution problems have failed to improve or have grown more serious. In addition, a number of serious new air pollution problems have emerged that were not anticipated by the Clean Air Act Amendments of 1977. Indeed, as President George Bush said, in transmitting on July 21, 1988 to Congress a comprehensive proposal to amend the Act, “progress has not come quickly enough and much remains to be done.”

The President's proposal, which was introduced in July 1989 as H.R. 3030 and is being reported out of this Committee today, with amendments, is the culmination of efforts by this Committee during the 1980s to fashion legislation that enjoys broad bipartisan support. The President is to be commended for his leadership and support in bringing this bill to the House floor in less than a year. As he said, the bill “is designed to achieve consensus by complementing the important efforts of the Congress in recent years, so that we can move forward this year with a plan to protect our Nation's air.” Remarkably, that “consensus” was achieved in our Committee, and the bill was ordered reported by a vote of 42–1.

NATIONAL AMBIENT AIR QUALITY STANDARDS

The cornerstone of the Clean Air Act is the effort to attain and maintain NAAQS, established to protect the public health and welfare from high pollution levels common in many cities and rural areas. For such pollutants, as lead (Pb), particulate matter (TSP), nitrogen dioxide (NO₂) AND SULFUR DIOXIDE (SO₂), THE PROGRAM FOR ACHIEVING NAAQS HAS BEEN BROADLY SUCCESSFUL. HOWEVER, FOR OTHER EXTREMELY IMPORTANT POLLUTANTS, INCLUDING OZONE (O₃) POLLUTION, CARBON MONOXIDE (CO) POLLUTION, AND SMALL PARTICULATE MATTER (PM-10) POLLUTION, THE PROGRAMS OF THE ACT AND THE IMPLEMENTATION OF THOSE PROGRAMS BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE STATES HAVE NOT ACHIEVED THE NEEDED REDUCTIONS TO MEET THE NAAQS.

The 1970 and 1977 Amendments to the law established a partnership between EPA and the States. EPA sets the national uniform air quality standards that represent the maximum allowable concentration of each of the six “criteria” pollutants. The primary standards are required to be set at a level that “protects the public health with an adequate margin of safety,” without regard to the economic or technical feasibility of attainment. The States are responsible for meeting the NAAQS through State Implementation Plans (SIPs) approved by EPA “as expeditiously as practicable,” within the deadlines set by Congress. The States are required to develop the SIPs to estimate the emission inventory and establish control programs to achieve the required

reductions. The 1977 amendments added three additional control programs requiring ozone and CO nonattainment areas to retrofit controls on existing stationary sources, apply more stringent limits on new stationary sources, and develop motor vehicle inspection and maintenance programs (I/M).

EPA is responsible for setting standards for mobile sources, which include a wide variety of transportation modes (other than highway-type vehicles). EPA also issues rules for new stationary sources to be implemented by the States.

NAAQS for oxidants (which are a group of chemically related pollutants of which ozone is the most important and typically comprises, according to the Office of Technology Assessment (OTA), 90 percent of the total mass of photochemical oxidants measured in urban air) were first set in 1971 and revised by EPA in 1979. It is defined as a daily, maximum, 1-hour average concentration of 0.12 parts per million (ppm), not to be exceeded more than once per year on average. An area is classified under the Act as “non-attainment” for ozone if peak 1-hour average concentrations measured at any monitor exceed 0.12 ppm more than one day per year, averaged over three years.

In 1970, the deadline for meeting the primary NAAQS was 1975. Two years after that, 78 areas were still violating the more stringent ozone standards of 0.08 ppm. This failure was attributed to the fact that mobile source emission reductions that both EPA and the States had anticipated were not fully realized, although they did achieve significant reductions. Controls were required on only a few stationary source categories. Transportation control measures (TCMs), such as gas rationing, restricted parking, and restricted freeway lanes, were resisted and in 1974 Congress prohibited EPA from requiring many TCMs.

In 1977, the ozone and CO deadlines were extended to 1982, with opportunity for extensions by EPA to 1987. New SIPs were required in 1979 and again in 1982. A new source could only be considered in nonattainment areas at the Lowest Achievable Emissions Rate (LAER). TCMs had to be considered and I/M was to be required in some areas.

By 1983, about 40 areas obtained deadline extensions to 1982, with approvals and disapprovals occurring in 1983 and 1984. More than 15 areas were in violation and did not seek extensions. EPA proposed a construction ban sanction of major sources, but Congress prohibited EPA from using appropriated funds to impose the sanctions in areas with approved SIPs. Thus, those areas that failed to meet the 1982 deadline were merely required to submit revised SIPs to show attainment by 1987. By the end of 1987, EPA had not taken final action on them. Since 1983, sanctions have been imposed only on areas with deficient SIPs or areas that failed to implement SIP commitments. In July 1987, construction bans were proposed in 11 ozone nonattainment areas, but were precluded in December 1987 until August 1988. Since then some bans have been promulgated. In November 1987, EPA proposed a “post-1987” ozone policy, but it has not been finalized.

Since 1977, there has been some progress in reducing volatile organic compounds (VOCs), one of two principal ozone precursors. Nationwide, EPA sets the decrease at 10 percent between 1978–88, due primarily to a 30-percent decline in mobile source emissions despite a 25-percent increase in vehicle-miles traveled. OTA reports that stationary source VOCs increased by about 3 percent since 1977. The other major ozone precursor, nitrogen oxide (NO_x), EMISSIONS DECLINED BY LESS THAN 2 PERCENT.

After 10 years, many urban areas in the nation, and many rural areas, are currently in violation of the health-based NAAQS for ozone smog, although ozone concentrations have been lowered in many nonattainment areas and increased in many others. According to EPA, the list of areas in violation of the ozone standard in 1988 includes 101 cities and towns, which are home to more than 112 million Americans, while in 1987 the number was nearly 70 areas.

In January 1988, the General Accounting Office (GAO) issued a report of an investigation requested by the Committee entitled “Ozone Attainment Requires Long-Term Solutions to Solve Complex Problems.” In a January 27, 1988 letter to EPA, the Committee discussed the GAO findings:

While the GAO report is critical, in some respects, of your agency, it clearly shows that the criticism must be shared by many, including Congress. In 1977, Congress tried to waive a “magic wand” and command that all nonattainment areas will meet the applicable National Ambient Air Quality Standards under the Clean Air Act (CAA) by December 31, 1982. In the case of ozone (and, of course, carbon monoxide), we were a little uncertain about our magical powers and provided an opportunity for an extension until December 31, 1987. Now, as the GAO shows, both dates have come and gone and it is clear that, in the case of ozone (and carbon monoxide), we had no “magic” solutions. We could command and set arbitrary dates, but until we understood and dealt with the real problems, predictably failure would be the result. The GAO, which centered its investigation of Los Angeles, California, Houston, Texas, and Charlotte, North Carolina, shows that there were and are many reasons for this failure (p. 46):

Our review of three areas' efforts to reduce ozone identified a variety of problems that individually or in combination contributed to not achieving the reductions outlined in their SIPs. In some instances planned measures were not implemented and some that were implemented were not always being enforced or were not as effective as anticipated. In addition, ozone reductions planned for may not have been realistic because hydrocarbon emission inventories were understated, a deficient model was used in one instance, and incorrect data were used in the modeling in another instance. Further, uncertainties that exist in the models and some of the assumptions used in the tools may have led to inaccuracies in the ozone plans.

While more effective program implementation and stronger oversight by EPA could have led to correcting some of the problems, thus leading to greater ozone reductions, this alone would not have resulted in the areas meeting the ozone deadlines. We believe that other factors, such as the scientific uncertainties in ozone formation, weather patterns, inventory sources, modeling, and determining the amount of control needed, plus the enormity of the problem, all contributed to the deadlines being unachievable. Thus, many areas will miss the act's December 31, 1987, deadline, and some areas, such as Los Angeles and Houston, will not meet the standard for many years.

Our review of experience with past ozone reduction efforts suggests that no single solution can be effective. Rather, a variety of solutions and the recognition that attainment in some areas can be achieved only in the long term are necessary to being reducing ozone levels more effectively in areas that exceed the standard. Accordingly, we believe the Congress should amend the CAA and (1) establish a strategy that differentiates among areas with regard to attainment dates based on the severity of their ozone problem and (2) revise the act's sanctions and set a clear policy on when the sanctions will be activated. (Underlining supplied.)

* * * * *

Also, the GAO report clearly demonstrates that even with different attainment dates, different control strategies will be required for these nonattainment areas because ozone levels vary “significantly.” This is “because of differences” among nonattainment areas—even among those in the same category—“in population, number and types of sources emitting hydrocarbons, and in some cases meteorological and geographical factors that contribute to ozone formation.”

In its 1988 report, “Catching Our Breath,” OTA reported on workshops it sponsored that included State and local air pollution control agency officials, then current and former EPA staff and others “to explore the reasons why this decade-long effort has not resulted in more areas attaining the standard.” OTA said:

Participants at each workshop tended to agree on a few problems that they saw as most significant. However, the problems emphasized by EPA and State regulators were quite different. State and local respondents emphasized the problems of transport of ozone and ozone precursors, inadequate air quality models, States' inability to promulgate regulations without EPA support, and inadequate EPA performance. EPA respondents most often cited emissions growth, inaccurate emissions inventories, unreasonable deadlines in the Act, and “lack of political will” to solve the ozone problem.

Many of the key problems identified in the OTA workshops were similar to those discussed in a recent * * * [GAO] report [5]. The GAO investigators also identified problems stemming from inaccurate emissions inventories, flawed modeling, and

ineffective EPA oversight. In addition, they found that some control measures planned by the States were not implemented or were poorly enforced.

It should also be noted, that recent litigation in New York and New Jersey concluded that SIP commitments had not been implemented and new dates were set by the Court. In Los Angeles, the court concluded that the SIP which was pending at EPA for years should be disapproved, which resulted in the area developing a new plan that EPA must now consider for approval, and unless the law is changed, it may not be approvable.

Violation of the health-based NAAQS is also widespread for both CO pollution and particulate matter pollution. According to EPA, 25 million Americans now live in areas that have failed to attain the small-particulate matter NAAQS. Thirty million Americans in 52 different cities and towns reside in areas where levels of CO pollution exceed the NAAQS. of course, in both cases not all are regularly exposed to these pollutants at levels above the standard.

The health consequences, discussed later in this report, of violation of these standards can be serious. CO reduces the ability of blood to bring oxygen to the body's tissues. Fetuses, who must solely rely on oxygen delivered through the mother's blood stream, are at risk of serious nervous system effects, including permanent brain damage, from the mother's exposure to CO pollution. Those with heart and circulatory ailments are also especially vulnerable because their circulatory systems often already have an impaired capacity to transport oxygen.

It should be noted that in March 1990, EPA issued a draft air quality criteria document for CO for external review. While it does not represent EPA policy, it discusses these health effects extensively. The summary states:

Concerns about the potential health effects of exposure to carbon monoxide have been addressed in extensive studies with various animal species as subjects. Under varied experimental protocols, considerable information has been obtained on the toxicity of CO, its direct effects on the blood and other tissues, and the manifestations of these effects in the form of changes in organ function. Many of these studies, however, have been conducted at extremely high levels of CO (i.e., levels not found in ambient air). Although severe effects from exposure to these high levels of CO are not directly germane to the problems from exposure to current ambient levels of CO, they can provide valuable information about potential effects of accidental exposure to CO, particularly those exposures occurring indoors.

The PM-10 pollution can produce an array of serious health impacts including temporary reductions in lung capacity, aggravation of pre-existing respiratory ailments, cancer, and even death. Children are especially vulnerable to PM-10 health effects because of their higher respiratory rate, which increases the quantity of PM-10 brought into the lungs, and because of the sensitivity of their small lungs. The elderly, and those with respiratory diseases, such as asthma, bronchitis, and emphysema, are also particularly vulnerable. Some types of PM-10 pollution, including diesel particulates (which cause cancer) and sulfates and nitrates (associated with serious respiratory ailments) can cause particularly severe adverse health effects.

EPA's Trends report for 1988 provides an important history of this pollutant as follows:

Air pollutants called particulate matter include dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust as well as particles formed in the atmosphere by transformation of emitted gases such as sulfur dioxide and volatile organic compounds.

Annual and 24-hour *** [NAAQS] for particulate matter were first set in 1971. Total suspended particulate (TSP) was the indicator used to represent suspended particles in the ambient air. TSP is measured using a high volume sampler (Hi-Vol) which collects suspended particles ranging up to approximately 45 micrometers in diameter.

On July 1, 1987 EPA promulgated new annual and 24-hour standards for particulate matter, using a new indicator, PM510 THAT INCLUDES ONLY THOSE PARTICLES WITH AERODYNAMIC DISMETER SMALLER THAN 10

MICROMETERS. THESE SMALLER PARTICLES ARE LIKELY RESPONSIBLE FOR MOST ADVERSE HEALTH EFFECTS OF PARTICULATE BECAUSE OF THEIR ABILITY TO REACH THE THORACIC OR LOWER REGIONS OF THE RESPIRATORY TRACT. THE ORIGINAL (TSP) STANDARDS WERE AN ANNUAL GEOMETRIC MEAN OF 75 MICROGRAMS PER CUBIC METER (6mG/M53), NOT TO BE EXCEEDED, AND A 24-HOUR CONCENTRATION OF 260 6mG/M53, NOT TO BE EXCEEDED MORE THAN ONCE PER YEAR. THE NEW PM510 STANDARDS SPECIFY AN EXPECTED ANNUAL ARITHMETIC MEAN NOT TO EXCEED 50 6mG/M53 AND EXPECTED NUMBER OF 24-HOUR CONCENTRATIONS GREATER THAN 150 6mG/M53 PER YEAR NOT TO EXCEED ONE.

* * * * *

Although some monitoring for PM510 WAS INITIATED PRIOR TO PROMULGATION OF THE NEW STANDARDS, MOST NETWORKS DID NOT PRODUCE DATA WITH APPROVED REFERENCE SAMPLERS UNTIL 1987 OR 1988. THUS, ONLY A LIMITED DATA BASE IS CURRENTLY AVAILABLE TO EXAMINE TRENDS IN PM510 AIR QUALITY. * * *

* * * * *

TSP data have been collected throughout the nation for over 30 years, and have exhibited substantial declines in pollutant concentration. The most recent 10-year period merely represents the tail end of over 3 decades of improvements resulting from nationwide air pollution control. Historical emission estimates are also available and have also been compiled for this same 30-year period.

Titles I and II of these amendments establish a new regime of control requirements for stationary and mobile sources to bring about attainment of the NAAQS for ozone air pollution, CO pollution, and PM-10 pollution.

HAZARDOUS AIR POLLUTANTS

Section 112 was added to the Clean Air Act in 1970. It specifies that the EPA Administrator must list each "hazardous air pollutant for which he intends to establish an emission standard." EPA contends that this provision gives EPA discretion to decide what substances should be considered for listing and in what priority they should be considered. Once EPA has determined that a substance is hazardous, as defined in the Act, it appears that EPA must list that substance and propose standards.

The term "Hazardous Air Pollutant" is defined in section 112 to mean: "an air pollutant to which no ambient air quality standard (under section 108 of the Act) is applicable and which in the judgment of the Administrator causes, or contributes, to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." Once a substance is listed, the Act requires EPA to propose (within 180 days after the listing) regulations establishing emission standards applicable to both new and existing stationary sources, together with a notice of a public hearing. This section also requires EPA to promulgate an emission standard within 180 days after standards are proposed, unless EPA finds, based on the hearings, that the substance "clearly is not a hazardous air pollutant."

The emission standard must be set at a level which, in EPA's judgment, "provides an ample margin of safety to protect the public health" from the pollutant. Once the emission standard is promulgated, it is effective immediately, but EPA can grant waivers to allow up to two years to comply.

In the 20 years since this section was enacted, EPA has acted to establish standards under section 112 for seven hazardous air pollutants. This is only a small fraction of the many substances associated (at some level of concentration) with cancer, birth defects, neurological damage, or other serious health impacts.

At a November 7, 1983 Committee hearing, the effectiveness of section 112 was discussed as follows:

Listing decisions have been few and far between. Since enactment of section 112 in 1970, only seven substances have been listed as hazardous, with five being listed by June 1977. Only four have been regulated, and that occurred during the Nixon-Ford administrations. During the Carter administration, three of the seven substances were listed, with emission regulations proposed for two of these substances, but were not finalized. None have been listed during the Reagan administration although regulations have been proposed for one substance, but not finalized.

* * * * *

No decision is the history of this program. There is a lot of action, but nothing final. The history of this legislation in this committee indicates that there is fault with the basic legislation, fault with its administration, fault with the public understanding, and fault the way the legislation has been working to protect the public health.

The GAO reports that both of the 180-day statutory deadlines for proposing and finalizing emission standards for listed pollutants and the resulting lawsuits enforcing those deadlines are significant causes, although not the only ones, for delays in listing. As the GAO observed, those lawsuits, which undoubtedly grew out of frustration with EPA's foot-dragging, disrupted EPA by causing it to redirect its resources. To avoid similar problems caused by not proposing or finalizing standards, the GAO said 'EPA may be reluctant to list pollutants' until more of the standard-setting information is ready.

The potential magnitude of national air toxic emissions were entirely unknown prior to a 1985 survey of the chemical industry by the Health and Environment Subcommittee, in which voluntary reports by industry officials disclosed emissions of over 60 million pounds annually. While the estimates were criticized by industry at the time as far too high, more recent data has found emissions to be greater than this initial estimate by more than an order of magnitude.

Data collected under section 313 of the Superfund Amendments and Reauthorization Act of 1986, the "right to know" provision, revealed that in 1987 manufacturing plants emitted a total of 2.7 billion pounds of over 275 toxic substances into the atmosphere in 1987, some of which are also VOCs. Sixty of the substances were known or suspected carcinogens, with total emissions amounting to over 200 million pounds.

The chemical industry is the largest single source of industrial emissions of air toxics, emitting some 35 percent of the total. Other significant industrial sources are the primary metal industry (9 percent), the paper industry (9 percent), motor vehicle manufacturers (8 percent), and the rubber and plastics industry (5 percent). In total, more than 15,000 facilities reported emitting toxic chemicals into the air in 1987.

In commenting on that reporting in a September 14, 1989 letter to the Committee, EPA's Administrator, the Honorable William K. Reilly, said:

I agree that the emissions data reported under Section 313 for toxic chemicals emitted to the air do not give an accurate indication of the potential public health hazard associated with these chemicals. The SARA Section 313 reporting requirements do not require submission of any information on exposure to these chemicals or, for that matter, any monitoring data. In addition, emissions are reported on an annual basis only, aggregated for the entire plant. Thus, exposure and related public health risk cannot be derived from the Section 313 data alone. Nevertheless, the air emissions estimates reported under Section 313 are useful for the Federal air toxics program, and indicate that there is further work in the area of identifying and controlling the emissions of hazardous air pollutants. We are now incorporating the Section 313 data into our air toxics data base.

Concerning the quote attributed to an EPA spokesman, note that the reporting requirements under Section 313 apply only to certain industries which meet thresholds for processing or handling the chemicals listed under Section 313. Emissions from thousands of smaller plants were not reported. Moreover, recent studies have suggested that as much as one-half of the air emissions of toxic chemicals originate from mobile sources, none of which are subject to reporting under Section 313. Although the total emissions estimate of toxic compounds is not readily calculated, these limits on reporting would indicate

that the Section 313 data underestimate total air toxics emissions. However, this is not to imply that we are ignorant of the contribution of other sources to the air toxics problem.

* * * * *

I agree with your concern for the possible misinterpretation of the data collected under Section 313. These data are stated in terms of pounds solely to be consistent across all the media addressed and to enhance the precision of the estimate. The EPA has no intention of unduly alarming the public, and is merely reporting the data as collected without manipulation. Further assessment of the data and the sources involved is needed to determine the nature of any public health impact posed by these releases. You are correct in noting that the air releases (converted to 1.13 million metric tons) are a relatively small fraction of the approximately 135 million metric tons estimated for all of the criteria air pollutants. Nevertheless, 1.13 million metric tons of potentially hazardous air pollutants are cause for concern; EPA staff is evaluating the Section 313 air data as a fundamental input to our system for pollutant/source category prioritization and potential regulation.

As to the extent of controls of hazardous pollutants, the Administrator observed:

A quantitative estimate of how much of the Section 313 air emissions are subject to control is difficult to provide. Qualitatively speaking, the amount of toxic emissions subject to direct control under Section 112 of the Clean Air Act is small. However, emissions of toxic compounds have been reduced substantially through the programs to implement the national ambient air quality standards. In addition, some State and local government agencies, with the support of EPA, have implemented air toxics control programs which address a number of the pollutants included in the Section 313 data.

Toxic air pollutants are also emitted by smaller "area" sources, such as print shops and metal plating operations. Collectively, these emissions exceed those from large industrial sources.

These emissions can cause serious health effects. EPA has estimated that emissions of toxic air pollutants may cause some 1,600 to 3,000 cancer cases a year. Numerous studies, including EPA's July 1989 "Analysis of Air Toxics Emissions, Exposures, Cancer Risks, and Controllability in Five Urban Areas" suggest that area wide lifetime excess cancer risks from urban air toxics may range from about 1 in 10,000 to 1 in 1,000, and that cancer incidence may range from 1 to 23 excess cases per year per million population. These are exceptionally high levels of risk. EPA's goal is to protect the greatest number of people possible from cancer risks greater than 1 in 1,000,000.

Some of the highest individual risks, called maximum individual lifetime risks (MIR), occur near large industrial sources. According to data from EPA, there are 72 facilities associated with MIRs above 1 in 1,000, including 13 facilities with MIRs greater than 1 in 100, and 1 facility (the Texaco butadiene plant in Port Neches, Texas) with an MIR greater than 1 in 10. In providing such data, EPA uses as estimated MIR which represents the highest theoretical exposure, and with it estimates that a resident's chance of contracting cancer as a result of inhaling toxic emissions over the course, depending on the person's proximity to the source, of a normal 70-year life at a facility's fence line while breathing outdoor concentrations of pollutants for 24 hours a day is greater than 1 in 10,000. In some areas, the average risk may be as high as 1 in 1,000. These are exceptionally high levels of risk, particularly since most people are not actually exposed to this extent.

In using the MIR, EPA's Administrator provided this caution in releasing data on air toxics in 1989.

It is important to note that the MIR estimate associated with a particular facility does not provide information on the distribution of risk across the population residing in the vicinity of that facility. The MIR, particularly in preliminary risk assessments, is best characterized as a rough measure of the potential maximum individual lifetime cancer risk associated with exposure to the maximum modeled long-term concentration. The MIR is not an appropriate measure of the risk level affecting the entire population residing near a particular facility.

Toxic emissions can also cause an array of serious illnesses besides cancer. These include birth defects, damage to the brain or other parts of the nervous system, reproductive disorders, and genetic mutations. In the case of emissions of some neurotoxins, even small doses can be lethal. In 1987, EPA ranked qualitatively the noncancer risks created by over 30 environmental problems within the agency's jurisdiction. Toxic emissions ranked as the second greatest threat to human health, exceeded only by the health risks attributable to ozone and other "criteria" pollutants such as CO and PM-10.

Toxic emissions can cause adverse impacts to the environment as well as to human health. The Great Lakes in particular have been adversely affected, because their huge surface area acts as a sink for the deposition of toxics from hundreds of miles away. There is concern that many Great Lakes fish species may not be edible because of toxic contamination.

Title III of the Clean Air Act Amendments of 1990 establishes a statutory list of over 170 hazardous air pollutants, and provides new requirements for control of hazardous air pollutant emissions from major sources and area sources.

Accidental releases of hazardous air pollutants.

Accidental releases of air toxics occur with surprising frequency. EPA reports in August 1988 that between 1980 and 1987, 11,048 accidental releases of toxic chemicals occurred in the United States. EPA states that releases killed 309 people and caused 11,341 injuries. They also caused the evacuation of nearly 500,000 people. Of these releases, 4,375—or nearly two a day—produced hazardous pollutant clouds. Although these releases were just 40 percent of the total, they represented 63 percent of the accidental releases causing death or injury and 75 percent of the releases requiring evacuations.

The Department of Labor (DOL), however, has not confirmed EPA's data and in a March 1, 1990 letter to the Committee, the EPA Administrator said the "data used to compile" the report containing these figures "originated from a wide variety of sources including news accounts and reports to Federal and State authorities." He added that most of the reports were not "independently verified and hence, in many cases, the data are uncertain." The DOL also questions the reliability of the data:

Regarding your inquiry as to whether DOL agrees with EPA's statement that more than 11,000 accidental toxic releases occurred between 1980 and 1987, and that more than 10,000 persons were injured and more than 300 died as a result, we defer to EPA's response to you on this issue, while noting that DOL does not have comparable data. OSHA requires employers to report any accident that results in a fatality or the hospitalization of five or more employees. Most OSHA accident investigations are conducted in response to these reports, although the agency often responds to accidents that do not meet its reporting requirements. Our data show that from FY 1980 through FY 1987, Federal OSHA, which covers approximately three-fifths of the nation's workplaces (the remainder being covered by OSHA-approved State programs), investigated 464 accidents in the chemical processing industry (Standard Industrial Classification 28) in which 270 workers died and 755 were injured. That is not to say that 11 of these accidents involved chemical releases; in fact, a considerable number of them resulted from general industrial hazards such as slips and falls, electrical hazards, or unguarded machinery. A recent study by Marsh and McLennan Protection Consultants (***) of large property damage losses in the petrochemical industries found that there have been no deaths to neighbors or bystanders in the 99 major occurrences in the United States and Canada over the last 30 years. This is not to say that an accident affecting the public could not occur in the United States. The study found several accidents outside the United States and Canada which did have a catastrophic effect on the public.

While some accidental releases may pose relatively minor threats to human health or the environment, others have the potential to be truly catastrophic. The most disastrous release ever was the accidental release of methyl isocyanate (MIC) from the Union Carbide chemical plant in Bhopal, India. On December 3, 1984, a storage tank burst open, releasing 30 tons of MIC into the atmosphere. The release killed over 3,000 people and injured more than 200,000. According to EPA's Acute Hazardous Events database report of August 31, 1988 (page 2-23), there have been 17 accidental releases of toxic chemicals in the U.S. since 1980 that had potential toxic effects greater than the Bhopal release.

Regarding the events at Bhopal, the Committee received testimony from the Union Carbide Chief Executive Officer, Warren Anderson. In a March 26, 1985 hearing, he provided a detailed chronology of the Bhopal accident, including the following:

Then at 12:15 a.m. on Monday December 3, the field operator again reported an MIC release near the VGS and MIC process filters. The control room operator checked the pressure again, and this time it was at 30 psig and climbing rapidly. Within moments it was beyond 55 psig, which is the top of the scale. The operator called his supervisor and ran outside to tank 610. He felt heat radiating from the tank, which also emitted rumbling sounds and a screeching noise from the safety valve.

As he ran back to the control room he heard the concrete over the tank begin to crack. As soon as he got to the control room he turned the switch to start the vent gas scrubber pump, which had been on standby since October 23 when the MIC unit was shut down. Temperature readings after the event suggest that circulation occurred during the event.

The MIC production supervisor notified the plant superintendent of the release at 12:20 a.m. When the plant superintendent, who was in the formulations area at the time, arrived at the MIC unit at about 12:25, he found a great deal of MIC in the atmosphere.

However, as to the Bhopal accident and to the findings of the EPA report, EPA's Administrator Reilly said it is his understanding from reports that "the storage tank at the Bhopal facility did not rupture" and that he disagrees with the report's conclusions. He adds:

Heat and pressure generated by a reaction with water in the storage tank could not be controlled because cooling systems were shutdown. Pressure was vented, as it was supposed to, through venting and scrubbing systems. Because these systems were also shutdown, a large quantity of methyl isocyanate was allowed to escape, unscrubbed.

It is impossible to make a direct comparison of the results of this event with the results of any other accident. The fact that so many safety systems were inoperative is more of an indication of a lack of management control and procedures than a failure of safety equipment designed to control releases. This accident would not have been prevented by "bolting on" more hardware.

The "quantity/toxicity ratio" in the Acute Hazardous Events database was devised in an attempt to identify the factors that lead to more serious or less serious consequences from relatively large-scale releases. The report states that 17 events in the U.S. had a ratio that exceeded the Bhopal ratio. The report does not conclude that 17 events had "the potential to create disasters as great as the one in Bhopal". The reason this conclusion cannot be reached is because of factors, described in the report, that are critical to the consequences of an accident related to the quantity actually released, site preparedness, containment and mitigation. In most cases, the relatively minor health consequences of these releases are attributable to actions that facility managers can and did take to avert more serious outcomes; "luck" had little to do with the outcomes.

Existing law contains few provisions regulating the prevention, detection, or response to accidental releases. The Emergency Planning and Community Right-to-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act of 1986) established local emergency planning commissions and directed the local commissions to develop plans for responding to chemical accidents, including those that involve releases to the air. That Act also required industrial facilities to notify the local commissions when the facilities possess toxic substances above threshold amounts and when accidental releases occur. However, it does not require industrial facilities to prevent, detect, or respond to accidental releases.

In the case of section 112, the GAO, in a February 23, 1990 opinion to the Committee regarding an assertion that EPA had authority regarding accidents, states:

In our opinion, except under limited circumstances, section 112, which is concerned with routine, and not accidental, releases, does not provide EPA authority to carry out the recommendations of the Coalition to regulate the accidental release

of chemical air pollutants. As explained below, section 112 generally authorizes only numerical emission standards. The only statutory language that arguably could support the recommendations of the Coalition is the provision section 112 authorizing EPA to set work practice standards. This provision might be used by EPA to control the source of hazardous emissions for which a numerical standard is not feasible, regardless of whether those emissions are routine or accidental. This provision, however, would not authorize EPA to require hazardous assessments, as recommended by the Coalition.

Title III includes a new program under which EPA is to establish reasonable and appropriate regulations to prevent and detect accidental releases to the maximum extent practicable.

ACID DEPOSITION

The Clean Air Act was originally designed mainly to reduce high pollution levels that tend to occur near major pollution sources. It did not contemplate that long-distance transport of air pollutants could cause widespread adverse impacts.

Scientists have since learned that SO₂ AND NO_x POLLUTION FROM POWER PLANTS, FACTORIES, AND OTHER SOURCES CAN BE CARRIED HUNDREDS OR EVEN THOUSANDS OF MILES THROUGH THE ATMOSPHERE, CHEMICALLY TRANSFORMED IN THE PROCESS, AND EVENTUALLY RETURNED TO EARTH AS SULFURIC AND NITRIC ACIDS. THESE ACIDS OFTEN AIR PICKED UP IN DROPLETS OF RAIN OR SNOW, BUT SOMETIMES THE PARTICLES SIMPLY FALL BACK AS "DRY DEPOSITION." AS DESCRIBED BRIEFLY BELOW, SUCH ACID POLLUTION HAS BEEN ASSOCIATED WITH A VARIETY OF HARMFUL EFFECTS, ON HEALTH, ESPECIALLY TO THOSE WITH RESPIRATORY AILMENTS; LAKES; FORESTS; AND MAN-MADE MATERIALS, SUCH AS BUILDINGS, BRIDGES, STATUARY, AND CAR FINISHES.

Because of these concerns, the Congress in 1980 established the National Acid Precipitation Assessment Program (NAPAP) to conduct a 10-year research effort into the causes and effects of acid deposition. NAPAP is scheduled to release its reports in September, 1990.

The small acidic sulfate and nitrate particles (acid aerosols) which form in the atmosphere from SO₂ AND NO_x POLLUTION IRRITATE THE LUNGS, CAUSING CONSTRICTED BREATHING. THEY POSE RISKS TO ASTHMATICS AND OTHERS WITH ALREADY IMPAIRED BREATHING ABILITIES. SOME EPIDEMIOLOGICAL STUDIES HAVE SUGGESTED THAT ACID AEROSOLS INCREASE THE INCIDENCE OF CHRONIC COUGH AND BRONCHITIS AND DEATH RATES.

Acidification of lakes and streams in the U.S. is another widespread effect of acid deposition. Although there are some natural acidic water bodies, "most of the acidity comes from acid deposition," according to findings of NAPAP. Nationally, acid deposition has reportedly acidified over one thousand large lakes (greater than 10 acres) and thousands of miles of streams. According to OTA, thousands more lakes and streams are "extremely vulnerable" to further acidification.

Certain subregions are particularly hard-hit, according to NAPAP. In the Adirondack Mountains in the Northeast, for instance, 11 percent of the lakes are already acidic and 36 percent are susceptible to episodic acidification. On the Michigan Peninsula in the Upper Midwest, 10 percent of the lakes are already acidic and 19 percent are susceptible to episodic acidification.

Acid deposition has been implicated in the damage of some forests. Contact with highly acidified rain or fog can directly injure leaves and needles. And over the long term, acid deposition may stunt tree growth by altering soil chemistry, both by washing away vital nutrients, such as magnesium and calcium, and by contaminating the soil with heavy metals like aluminum, that are freed from soil particles.

The red spruce forests along the crest of the Appalachian Mountains, which stretch from Maine to Georgia, have been the most damaged. These forests have suffered widespread decline, including the death of 40–70 percent of the spruce on some

mountaintops in Vermont, New York, and North Carolina. NAPAP has found that regular exposure to extremely acidic clouds (average pH of 3.6) is contributing to the decline, along with exposure to ozone, disease, insects, and unusual weather conditions.

The pollutants that create acid deposition also have a major impact on visibility. The sulfate particles that form from SO₂ EMISSIONS SCATTER LIGHT AND REDUCE VISIBILITY. THE PROBLEM IS PARTICULARLY GREAT DURING SUMMER MONTHS, BECAUSE HIGH HUMIDITY AND TEMPERATURES PROMOTE SULFATE FORMATION.

Sulfate pollution's visibility impacts are extremely widespread. Throughout the East Coast, summertime visibility has decreased by 50 percent over the last 40 years. In fact, due to these visibility impacts, the summer has changed from the season with the greatest visibility in the East to the season with the worst visibility. Sulfates are the most important contributor to visibility impairment in parks. For instance, they cause 70 percent of the summertime visibility impairment in Shenandoah National Park, according to the National Park Service. The comparatively good visibility in pristine areas, such as national parks in the West, is especially susceptible to visibility impairment.

Finally, acid deposition causes substantial economic impacts by eroding man-made building materials, such as steel, stones, and paint. According to some estimates, the cost of damage in 17 Eastern States alone could be as high as \$2 billion per year.

Title V includes a new national program providing for a 10-million-ton reduction in SO₂ EMISSION FROM AGGREGATE 1980 LEVELS, AND A 2.5-MILLION-TON REDUCTION IN NO_x EMISSIONS FROM PROJECTED 2000 LEVELS TO ADDRESS ALL OF THESE EFFECTS, INCLUDING THE IMPACT OF VISIBILITY, AS NOTED BY THE SECRETARY OF THE INTERIOR IN AN APRIL 5, 1990 LETTER TO THE COMMITTEE. THE SECRETARY SAID:

The 1977 Amendments gave Class I parks needed PSD protection only with regard to major new sources. Research and monitoring conducted by the NPS and others indicate that the most pervasive and possibly harmful air pollution affecting parks comes from long distances, broad regions, and often involves minor as well as major sources. For example, the worst summertime visibility impairment at the Grand Canyon most likely originates in the Southern California region. But, given our current scientific understanding, identifying a specific source within that region can be all but impossible. The only way to deal with this type of problem is with an effective, balanced national clean air program. Provisions which improve air quality in general will help the parks. Therefore, enactment of the comprehensive Clean Air Act amendments proposed by the Administration is essential to improving air quality in parks.

ECONOMIC IMPACTS

There have been many claims by the Administration, the business community (including small business), labor, environmentalists, and others about the costs, impacts and benefits of this bill on the economy, including jobs. While the extent of these impacts will depend on the myriad actions required under the bill and timing of regulatory implementation, it is fair to conclude that the bill will increase costs of electricity and coal use, provide environmental benefits, and affect existing and future jobs, including losses of many jobs and other effects on Communities and in some cases, increases in jobs.

During the hearings in both the Subcommittees on Health and the Environment and Energy and Power, Administrator Reilly testified that Title V of the H.R. 3030, as introduced, regarding acid rain controls would likely result in a loss of thousands of high sulfur coal mining jobs in several States. He also pointed out that because of coal switching, there would likely be a job gain in the low sulfur coalfields. This job issue has been a great concern to the Committee and to labor organizations. At the Committee's July 24, 1989 hearing there was the following exchange between Mr. Reilly and Chairman Dingell (Hearings, pp. 638-39):

* * * * *

Mr. Dingell. When the President announced his program, Senator Mitchell announced that it would put in the loss of 20,000 to 50,000 coal mining jobs, particularly in the high sulfur coal industry. I understand that also includes coal mining related jobs.

Do you agree with these job loss estimates?

Mr. Reilly. Our assessment of the job impacts is that there will be significant job losses in the coal mining industry and related industries where high sulfur coal is now mined, but that they would be offset, very substantially and probably more than offset by new jobs created in low sulfur—

Mr. Dingell. Where in the bill do you address this? Do you have provisions relating to additional unemployment benefits, establishment of new industries, subsidies for persons to move? How do you address the problem of the displaced miner?

Mr. Reilly. One is that in those areas where Governors so decide, they may determine that using coal that is provided that is currently being used in their State continue to be used, and simply prohibit any alternative.

Mr. Dingell. How about an Ohio mine that sells to Georgia or to Michigan or to Indiana or to New York?

Mr. Reilly. Well, in that case we are talking about free choice.

Mr. Dingell. What about the jobs of the good folk there? I know you are greatly concerned. What are you going to do about that and the legislation on that particular matter, Mr. Reilly?

Mr. Reilly. The Secretary of Labor is developing a package of—

Mr. Dingell. So you have done nothing in this legislation?

Mr. Reilly. That's correct.

Mr. Dingell. You are suggesting we should wait for the Secretary of Labor?

Mr. Reilly. There are no subsidies in this bill, no, sir.

According to testimony given by Richard Trumka, President of the United Mine Workers, on September 7, 1989, without technology incentives, high sulfur coal miners would lose over \$1 billion in direct income and coal field economies would be hit by an additional loss of over \$2.5 billion from industries that now provide support services and retail sales to the local work force.

Soon thereafter, the AFL-CIO sent a letter to the Committee stating:

The Administrator of the EPA recently testified that H.R. 3030, the Clean Air Act Amendments of 1989, will in fact lead to significant unemployment in high sulfur coal areas of northern Appalachia and the Midwest. Specifically, Title V provisions that control acid rain precursor emissions will cost 15,000 to 17,000 coal mine jobs by the year 2000, according to the EPA. The United Mine Workers estimates that the number of direct job losses will exceed 20,000, and that related industries will suffer additional job losses two or three times that number. Similar job losses are expected under the provisions of Title I of H.R. 1470, the bill introduced by Representative Sikorski.

Permanent unemployment for tens of thousands of workers is not the inevitable result of federal efforts to improve air quality. But it is surely the result of the acid rain provisions contained in H.R. 3030 and H.R. 1470. Consequently, the AFL-CIO cannot support either Title V of H.R. 3030 or Title I of H.R. 1470 in their present form.

Mandating the use of engineering controls on a limited number of plants, subsidized by a reasonable and fair cost sharing program, will result in emission reductions similar to those contained in H.R. 3030 and H.R. 1470 without crippling coal state economies. The AFL-CIO favors this approach, but we remain open to other solutions which will both improve the environment and maintain employment opportunities in America's mining industry.

In defending the President's market based approach to acid deposition reductions, which the Committee adopted with changes, Secretary of Labor Elizabeth Dole wrote on December 22, 1989:

A recent economic analysis of the President's acid rain proposals conducted for the Environmental Protection Agency provides midpoint estimates for gross coal mining job losses of 6 thousand in Phase I and an additional 10 thousand in Phase II. Placing these estimates in perspective, Bureau of Labor Statistics data show a decline in coal mining industry employment of over 100 thousand during the 1980s. During this same period, due to strong productivity gains, production has increased by almost 150 million short tons annually.

It is important to recognize that the demand for coal by utility companies will not diminish as a result of the President's acid rain proposals; to the extent that utilities install "scrubber" technology to meet the standard in the most efficient and least cost manner, demand for high sulfur coal should remain unaffected. Consequently, coal production and total industry employment would remain largely unaffected under the President's proposals. In fact, some studies suggest overall employment gains due to some shift in demand to lower productivity, low sulfur coal.

As you know, amendments to this complex bill made during the legislative process could significantly alter the economic and employment impacts that finally result in the years ahead. While we are fortunate in this instance to have lead time available to plan activities, it remains too early to implement any detailed, programmatic actions, either based on the President's proposal or on Amendments to it made by the Congress.

The Department remains prepared to respond to any worker dislocation that may eventually result from passage of the Clean Air Act Amendments. We continue to believe that programs and activities under Title III of the Job Training Partnership Act (JTPA) were designed for just this kind of potential structural adjustment. Title III funds available to the States, coupled with funds which I have committed to be made available from those reserved by the Secretary, should be fully adequate to meet the need.

I would be happy for the Department to review this matter more fully with you and your staff once the parameters of the final legislation and the economic parameters can be more clearly identified. At that time we will also consult with representatives of the AFL-CIO and the mineworkers, as well as appropriate State and local governments and organizations, as we have done in other cases under the JPTA program.

I want to assure you that I strongly support the President's flexible, market based approach to addressing the acid rain problem. Such an approach minimizes economic and employment effects. I also want to assure you again that the Department will do everything it can, at the appropriate time and within its jurisdiction, to address any worker dislocation which may result.

Later, in a March 7, 1990 letter, Administrator Reilly said:

However, under the President's bill, any approach can be used to achieve reductions and therefore, fuel switching is not the only choice even in Phase I. For example, some of the emission reductions in Phase I can be attained by increasing the utilization of plants that already have SO₂ scrubbers or increasing the utilization of existing coal cleaning facilities. These Phase I impacts may also be mitigated further in some high sulfur coal states, where the Governor has the authority (by state law) to require the use of in-state coal. Assuming that the bill is enacted in 1990, sources would have over five years

to comply with Phase I requirements where scrubbers, fluidized bed combustion, and duct injection can be used to reduce sulfur emissions.

The impact on the high sulfur coal mining industry will occur principally in Northern Appalachia and the Midwest; however, we believe that these impacts will be much less severe than what is anticipated by opponents of the legislation. The 1989 ICF analysis of H.R. 3030 showed that mining job slots in Northern Appalachia and the Midwest may be reduced by 12–15 percent in 1995 and 35–37 percent in 2000 due to fuel switching. As we indicated above, there are ways that these potential job losses can be mitigated even in Phase I and this is particularly true for Phase II where over 10 years of time will elapse between enactment and full implementation.

Please be assured that we remain concerned about the impacts of acid rain legislation on high sulfur coal mining jobs, and that we will work with you to minimize those impacts. I am definitely not interested in putting miners out of work. If you have further questions, please let me know.

The Committee was pleased to hear from both of these Administration officials about their concerns for people who now have jobs and, in particular from the Secretary of Labor, promise “to respond to any worker dislocation that may eventually result from passage of Clean Air Act Amendments.” Like the Administration, the Committee is “not interested in putting miners” or any workers “out of work.” In fact, to address these very concerns, in the 98th Congress a bill, H.R. 3400, was introduced that tried to reconcile acid deposition control with job protection. That legislation would have mandated technological controls on the most polluting utility plants in the country, so that high-sulfur coal mining jobs would be protected. The Committee also considered other measures that tried to respond to concerns about employment impacts. We want air quality, but not at the expense of jobs. The Committee bill seeks to prevent such job loss. However, no one can predict now if we will be totally successful. The onus will be on EPA, the Labor Department, State officials, the utility industry and other industries, and many more to ensure success.

As the CRS estimates contained in the following memorandum indicate, the costs of this legislation are significant and represent a major national commitment to clean air. Throughout its deliberations, this Committee has sought to focus these expenditures and structure the legislation in keeping with the original purposes of the Clean Air Act. Our goal, as originally stated in the 1970 Clean Air Act, 42 U.S.C. Section 7401(b)(1), has been to “promote the public health and welfare and the productive capacity” of our Nation. We have given EPA both the regulatory tools to accomplish cleaner air and the flexibility to protect our industrial and productive capacity. We intend that both be exercised equally.

We also intend, as in the past, that the States and local governments play a vital role in implementing this legislation. Where national regulation and uniformity is necessary, the legislation so indicates; otherwise, we recognize that “the prevention and control of air pollution at its source is the primary responsibility of States and local governments.” (Section 7401(a)(3)).

Each title in this bill represents a substantial program, with major responsibilities for Federal, State, and local officials. Given the size of these programs, there could be an understandable tendency to treat each title and each program in isolation. In implementing this legislation, EPA should consider fully the application and effects of various relevant provisions of the legislation and the Act. Where EPA must evaluate the need for additional controls under one title, it should, when permitted, consider the impact of controls achieved under another title.

CRS memorandum on costs

At the request of the Chairman, the Congressional Research Service (CRS) has provided an estimate of the costs imposed by H.R. 3030, as ordered reported, which may vary over time. The May 2, 1990 memorandum (without the referenced CRS memoranda) follows:

Congressional Research Service,

The Library of Congress,
Washington, DC, May 2, 1990.

Memorandum to: House Committee on Energy and Commerce.

From: John E. Blodgett, Assistant Chief, Environment and Natural Resources Policy Division.

Subject: Estimates of How Costs Imposed by H.R. 3030 as Reported by the Committee Vary Over Time.

This memorandum is in response to your request for an evaluation of the timing of costs that will be incurred as a result of H.R. 3030 as reported by the Committee on Energy and Commerce. The discussion is divided to reflect the bill's titles--Nonattainment, Mobile Sources, Toxics, Permits, and Acid Precipitation. We have also attached a series of memoranda that discuss the costs of S. 1630 as reported by the Senate Committee on Environment and Public Works (not as passed by the Senate); these describe the sources of many of the estimates underlying this memorandum, discuss caveats to them, and provide context on the programs.

Because the bill as reported has not yet been printed, the following discussions of H.R. 3030 are based on drafts and summaries of the Committee's action.

The cost estimates presented are in annualized 1989 dollars. Since this memorandum does not assess potential benefits, the cost estimates do not represent net costs. Where the timing of costs is tied to the date of enactment, we have assumed the legislation will be signed into law this year (1990).

This evaluation focuses on the timing of costs, rather than on the magnitude of impacts. Generally, cost figures included in this memorandum are derived from EPA estimates, adjusted by CRS as discussed in the enclosed memoranda.¹

Several major sources of uncertainty affect the estimates:

Uncertainties about the technical basis for implementing certain provisions; for example, how more stringent requirements for reformulating gasoline applicable after the year 2000 would be met, which could substantively affect refinery processes.

Uncertainties arising from contingent requirements, for example, whether auto emission standards would be tightened in a second round after 2003, which would be determined by how many areas remain in noncompliance.

Uncertainties arising from allowed flexibility, for example, whether utilities choose to switch fuels or install scrubbers to meet the SO₂ REDUCTION REQUIREMENTS OF THE ACID RAIN TITLE, AND WHEN UTILITIES MIGHT CHOOSE TO USE BANKED SO₂ ALLOWANCES.

Uncertainties arising from regulatory discretion, for example, under the air toxics title, whether EPA would impose regulations on utility boilers, or whether, after reporting to Congress on the impacts of toxic air pollutants on the Great Lakes, EPA would impose additional regulations to mitigate this problem.

Uncertainties arising from the unpredictability of future economic trends and technological developments: assumptions about rates of interest and about economic activity in the future are highly debatable, yet they substantively affect estimated costs. For example, largely reflecting different assumptions about future electricity demand, EPA's estimates for SO₂ EMISSIONS IN THE YEAR 2010 RANGE FROM AN INCREASE OF 1.4 MILLION TONS OVER THE YEAR 2000, TO A DECREASE OF 1.4 MILLION TONS.

Whether to ascribe certain costs to H.R. 3030, if they are likely to be imposed in any event, either by EPA or by States: for example, EPA is already developing regulations to reduce the volatility of gasoline and to limit the sulfur content of diesel fuel; and California has indicated its intentions to require alternatively-fueled fleet and passenger cars. It has been noted that since the current CAA requires all areas to have attained National Ambient Air Quality Standards, it is arguable that most title

I requirements effectively reimpose costs already mandated. Similarly, some costs attributed to title III of H.R. 3030 would in fact be reflected in regulations EPA has already proposed.

Selecting an appropriate discount rate is always controversial.

TITLE I: NONATTAINMENT ²

Fundamentally, title I is a continuation of what is already required in current law—that all areas attain National Ambient Air Quality Standards (NAAQS). Even without new legislation, it seems reasonable to assume that new deadlines and additional control measures would be imposed on areas that have failed to meet NAAQS by the deadline which has now passed. A majority of the major urban areas in the United States continue to be in nonattainment status: 101 areas for ozone, 44 areas for carbon monoxide, and 68 for particulate matter. Many of the controls prescribed in the bill are controls that States would likely implement on their own or by required to impose by EPA, in order to progress towards attainment. Thus it could be argued that the controls in title I are only a means of meeting existing requirements.

In addition, numerous controls specified in the bill have already been adopted by various regions. For example, 71 areas already have a vehicle inspection and maintenance (I/M) program in place, although the bill requires only 59 areas to implement I/M or enhanced I/M, based on the most recent monitoring data. Consequently, a portion of I/M costs should be attributed to current programs, and not to H.R. 3030. Also, EPA has authority under the current Clean Air Act to implement certain controls specified in the bill, but has not used it. For example, H.R. 3030 requires that EPA promulgate additional Control Technology Guidance documents (CTGs), an authority that is contained in current law. The costs of these controls are included in costs of new legislation, although they could arguably be excluded.

Timeframe of controls

The basic framework of title I divides nonattainment areas into five classifications, and assigns controls to each classification according to the severity of its failure to attain NAAQS. The least polluted areas are classified as Marginal areas and are assigned the fewest and least stringent controls. The more polluted areas—Moderate, Serious, Severe, and Extreme—are subject to increasingly stringent requirements. The requirements are cumulative, in that each classification has to implement all the controls imposed on less polluted areas in addition to the controls specified for its class. Table 1 lists these requirements, and Figure 1 illustrates their implementation across the various classifications.

The deadlines by which areas must meet NAAQSs are staggered, too, ranging from 3 years for Marginal areas to 20 years for Extreme areas. However, most requirements must be implemented within 3 years of enactment, with some requirements being imposed 6 and 8 years after enactment. The timing of the requirements listed in Table 1 is illustrated in Figure 2.

TABLE 1.—Area specific definitions and requirements, and Federal control measures

Marginal Areas: (42 areas in this classification):

- A. 6 months after classification (14 months after enactment), correct previous SIP for RACT.
- B. 2 years after enactment, submit a comprehensive accurate inventory.
- C. 2 years after enactment, sources to submit actual VOC and NO₅x emissions statement to State.
- D. 3 years after enactment, correct previous SIP to include I/M.

Moderate Areas: (32 areas in this classification):

E. based on EPA schedule, implement I/M program.

F. 2½ to 4 years, gasoline stations to implement stage II.

G. 5/31/95, RACT on certain stationary sources (not those less than 25 tpy).

H. 6 years after enactment, reduce 15 percent VOC and NO₅x.

Serious Areas: (18 areas in this classification):

I. 18 months after enactment, enhanced annual monitoring of ozone, VOC, and NO₅2 (including sources that emit 25 tpy or more).

J. 2 years after enactment, enhance I/M.

K. 4 years after enactment, attainment and Reasonable Further Progress (RFP) demonstrations by deadline.

L. 6 years after enactment, every 3 years thereafter, State to submit demonstration regarding projected transportation emissions.

Major source defined as 50 tpy VOCs.

1.2 to 1 offset required for VOCs.

Modifications on sources < 100 tpy VOCs to be offset 1.3 to 1 or LAER.

Modifications on sources > 100 tpy VOCs to be offset 1.3 to 1, no LAER.

Severe Areas: (8 areas in this classification):

M. 2 years after enactment, submit TCMs to offset growth.

Major source defined as 25 tpy VOCs.

Major sources to offset VOC emissions by 1.3 to 1, unless if BACT is employed then offset to be 1.2 to 1.

Extreme Area: (1 area in this classification):

N. 8 years after enactment, stationary sources that emit >25 tpy NO₅x to implement clean fuels requirements for primary fuels.

Major source defined as 10 tpy VOCs.

Major sources to offset VOC emissions 1.5 to 1, unless BACT is employed then 1.2 to 1.

Modifications to major sources to be offset 1.3 to 1.

TCMs may be included in SIPs during heavy traffic hours.

new technologies not yet developed may be include in SIPs.

Federal Control Measures:

X. 2 years after enactment, loading and unloading amrine vesels.

Y. 3 years after enactment, 11 new CTGs.

Z. 3 years after enactment, controls on aerospace coatings and shipbuilding and repair.

Source: CRS Compilation.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Costs

As indicated by Figure 2, most of the control requirements of title I will be initiated within a few years of enactment. Similarly, much of the costs will either represent continuations of current costs or start to be incurred soon after enactment; however, unlike title V, acid precipitation control, there is little reason to believe that the costs will decline over time. On the contrary, the need to maintain compliance with NAAQS once attainment is achieved, and the possible addition of further controls to bring the most polluted areas into attainment could imply rising costs in the future.

Selected costs are discussed below; for a more comprehensive assessment of ozone attainment costs, see the Office of Technology Assessment's report *Catching Our Breath: Nex Steps for Reducing Urban Ozone*³ and CRS's memo⁴ of February 1, 1990 [enclosed].

Area specific measures

I/M. Based on analysis prepared for EPA by E.H. Pechan and Associates,⁵ a basic automotive Inspection and Maintenance (I/M) program would cost State governments and auto owners approximately \$69 million per year in 1995, \$75 million in 2000, \$82 million in 2005, and \$88 million in 2010: an increase of \$19 million over 15 years. An enhanced I/M program would cost between \$73 and \$92 million in 1995, \$80 and \$100 million in 2000, \$87 and \$110 million in 2005, and \$94 and \$120 million in 2010. These cost do not take into account the costs of repairs to car owners or manufacturers for repairs covered by warranty, which the OTA estimates for enhanced I/M at \$2.5 billion for 1994, \$2.8 billion in 1998, and \$3.1 billion in 2004.⁶

RACT.—Although the bill requires Reasonably Available Control Technology (RACT) on different sizes of sources, depending on the nonattainment classification, E.H. Pechan assessed the cost of applying RACT on sources that emit 50 tons per year (tpy) or more of pollution, It was assessed at \$84 million per year in 1995, 2000, 2005, and 2010 for S. 1630.

Federal control measures

In addition to specific controls required in nonattainment areas, the bill would also require new federal controls to be implemented throughout the country, regardless of attainment designation.

EPA would be required to promulgate 11 CTGs within 3 years of enactment. Additionally, the EPA is to study VOC emissions from consumer and commercial products, and propose regulations based on the study. Within 3 years, the EPA is

to issue regulations to control VOCs from aerospace coatings and shipbuilding and repair. Two years after enactment, EPA is to promulgate standards to control VOCs from the loading and unloading of petroleum products from marine vessels. And finally, EPA is to conduct a study to establish a design value for ozone that represents a reasonable indicator of ozone air quality in nonattainment areas.

The Pechan analysis indicates development of 11 new CTGs would cost \$590 million in 1995, \$620 million in 2000, \$630 million in 2005, and \$650 million in 2010. The controls would be required within 3 years after enactment, and according to Pechan, costs would increase only slightly over time.

Other Federal measures that were assessed costs included marine vessels: \$42 million in 1995, \$47 million in 2000, \$51 million in 2005, and \$55 million in 2010. Although requirements for consumer and commercial solvents would be contingent on EPA's findings in a study, assuming they will be controlled, Pechan assesses the costs to be \$400 million in 1995, \$420 million in 2000, \$430 million in 2005, and \$440 million in 2010, which would be borne by producers and presumably at least partially passed on to the consumers. These figures again indicate slightly rising costs over time.

Controls not included in assessment

Sanctions.—The costs of sanctions are not included. It is not possible to predict what failures will occur and in which areas, until the attainment deadlines grow closer. Sanctions for not submitting a SIP or other SIP-related deficiencies result in either a cut off of Federal highway funding or a 2 to 1 construction offset of new polluting sources or a Federal Implementation Plan (FIP). Areas that fail to meet their specific attainment deadline would be reclassified into the next, more stringent category and be responsible for all additional control measures and new deadlines. This obviously would increase the costs imposed on such areas.

Sources in Severe and Extreme Areas that have failed to attain the NAAQS by their deadlines would be required to pay an annual fee of \$5,000 per ton of VOC emissions in excess of 80 percent of the baseline amount. The cumulative affect of this fee has also not been estimated, since it is uncertain what areas might miss their deadlines. It is likely some areas will miss their deadlines, and this fee will be applicable, but the future costs cannot be calculated.

Regional transport.—The bill requires a regional transport area to be established and a regional ozone commission to oversee the transport area. No costs are assigned to the requirement, because, unlike the Senate bill, specific measures are not assigned to the ozone transport areas. Although it seems likely that additional control measures would be called for, such as stage II vapor recovery or an I/M program, they are not estimated in the overall cost of the title since they are not mandated.

Carbon monoxide and particulate matter nonattainment controls.—Costs of Carbon Monoxide and Particulate Matter nonattainment area controls are not included in this discussion, due to lack of time and available data.

“Assumed controls”

For most categories of costs of title I, then, the pattern of costs is predominantly geographic—reflecting the attainment status of areas—rather than temporal. There is one major exception: what are called “assumed controls”—those controls necessary for final attainment after all currently known opportunities for reducing ozone precursors are achieved. These are called “assumed controls” because it is assumed that controls to achieve the final necessary reductions will be developed and implemented. Since the actual nature of these controls is not known, costing them is particularly uncertain. E.H. Pechan and Associates, preparing costs analyses for EPA, has assumed these will cost an average of \$5,000 per ton of VOC reduced. Because “assumed controls” are those that will be implemented after controls for which existing techniques exist, their costs will mostly fall later, and they account for virtually all of the increase in costs over time, as illustrated in Figure 3, which portrays Pechan's best estimate of

costs of nonattainment requirements for the original Administration bill. (Although the specific cost figures for H.R. 3030 as reported would vary, the relationship of the curves would be similar.)

The uncertainty of the costs of “assumed controls” is also reflected in the Pechan analysis. The estimated range of Title I costs in 1995 is \$4.1 to \$5.0 billion, while the estimated range in 2010 is \$7.6 to \$20.1 billion. Nearly all this wide range in 2010 is attributable to “assumed controls,” which accounts for 64 percent of the “best estimate” for total Title I costs.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Summary

As shown in Figure 3, costs for complying with Title I range from \$4 billion annually in 1995 to as much as \$12 billion (or more) in 2010, with virtually all of the increase attributable to “assumed controls,” the costs of which are particularly uncertain. Further, as noted earlier, arguably all of these costs could be said to be required by the current CAA, which already requires attainment of NAAQS.

TITLE II: MOBILE SOURCES ⁷

There are three categories of major cost-imposing provisions of title II of H. R. 3030: tightened emission standards, changes in gasoline composition, and introduction of alternative fuels and vehicles re-engineered to use them.

Tightened emission standards

Included in this category are (1) tighter tailpipe standards in the mid-1990s, including longer warranty periods and useful life, (2) onboard controls for refueling losses and for running losses (subject to determination of safety), (3) a new cold start CO standard, (4) onboard emission control diagnostics, (5) new controls on nonroad vehicles and engines, and (6) the possibility of a second round of tightening of tailpipe emission standards after 2003.

Except for item (6), these requirements phase in over several years and cost in the \$2 to \$3 billion per year range when fully implemented in 1995. Included in the range is the uncertainty as to whether or not onboard refueling controls will be found safe and thus required.

Item (6) is conditional; it might or might not occur, depending on technical and environmental developments in the 1990s. Were it to occur, its additional cost would be \$7 to \$9 billion per year according to EPA's technological forecast and about \$2 billion per year according to the California Air Resources Board technological forecast, in both cases assuming affected vehicle sales of 15 million per year. If it occurs, it would begin in 2004.

Changes in gasoline

Included in this category are requirements for volatility control, sulfur content of diesel fuel, and reformulated gasoline. Volatility control and sulfur content would be implemented by 1993 and would cost refiners \$500 million to \$1 billion per year. Added cost of reformulated gasoline would appear at this time to be 2 to 5 cents per gallon in the mid-1990s; this estimate assumes that refineries can make modest investments in such processing operations as distillation, isomerization, alkylation, and hydrogenation but would not have to make wholesale changes in equipment configurations. Total cost of the initiative will depend on how many areas become involved in the program, what the specifications turn out to be, and the extent to which producing the reformulated gasoline for part of the market will affect overall refinery investment requirements.

If the reformulated gasoline is limited to the nine worst ozone nonattainment areas, which use about 22 percent of the country's gasoline, the cost would be somewhere around \$500 million to \$1.25 billion per year. Although the requirement would begin with 1995 model year cars, the costs would probably begin sooner as the industry would phase in its production changes. Should more areas become involved, the costs would rise accordingly.

In model year 2000, a more stringent requirement for reformulated gasoline would come into force. In the bill as reported by the House committee, this requirement would appear to be attainable at costs of 5 to 10 cents per gallon (an admittedly soft number because no one knows what would have to be done to the composition and therefore to refinery equipment and operation). (On the other hand, the Senate bill has a more stringent requirement for ozone-forming emissions and a more specific set of individual constraints on fuel components; such additional specifications would most probably add greater cost to the system than the House bill currently would.)

At 10 cents per gallon and 20 percent or so of the gasoline, cost of the second phase of the House bill would be about \$2.5 billion per year, to be felt no later than 2000. Additional areas requiring reformulated gasoline would make this figure higher, but would also increase national emission reductions. At some portion of the national gasoline market, according to the industry, the change in product requirements would render significant portions of refinery capacity less useful while at the same time requiring significant new investments in other kinds of processing equipment. Should that occur, the industry has said, cost per gallon for reformulated gasoline would increase sharply; one industry estimate was as high as 25 cents per gallon in the second phase (2000 and later) based on such reasoning.

Alternative fuels and vehicles

As currently laid out, alternative fuels would enter the market as new vehicle are purchased for private and governmental fleets, starting in 1995 and achieving extensive penetration of the market by 2000. The urban bus transition would start sooner and be about complete by 1995.

Urban buses running on compressed natural gas (CNG) cost about \$10,000 each more than conventional diesel buses, and CNG filling stations cost more than diesel fuel pumps, but the fuel is cheaper. There are 2,000 to 3,000 new buses sold per year in major cities. Additional costs of the buses would be \$20 to \$30 million per year when fully implemented if they all decided on natural gas. Each refueling station will cost about \$150,000. At a minimum, there will have to be one for each city participating in the urban bus program and using CNG. That will be about two dozen cities, or about \$3 to \$4 million—but a one-time cost, not an annual one. There is a good chance that overall gas bus economics will turn out close to or perhaps favorable compared to diesel fuel.

Should methanol be the fuel of choice, it would appear that the bus won't cost much more, if any. However, the fuel will cost more, according to most studies, by perhaps 25 to 50 cents per equivalent gallon of diesel fuel. This is about \$2,000 to \$4,000 per year per bus additional fuel cost, should methanol economics turn out as expected. For an affected urban bus population of 39,000 or so, total incremental fuel bill could be as high as \$150 million per year in the late 1990s EPA believes that methanol costs will turn out to be competitive when the scale of use increases. If EPA is right, there would be no added fuel bill.

Urban bus costs would begin in 1992.

For nonbus fleets, choices must be made among methanol (M85 or M100), CNG, and liquified petroleum gas (LPG) as fuels. The provisions apply to cars and light trucks, while allowing heavy duty truck fleet operators to participate voluntarily. The program begins in 1995 and has provisions under which additional areas can become involved.

The cost situation for cars and light trucks is similar to that for buses, except the numbers are smaller—about \$1500 in added costs for a CNG car (the refueling station costs are the same). Where a CNG vehicle will work, it can be economic if driven

enough miles per year. For methanol, however, there is likely to be a modest first cost penalty plus the higher fuel cost, which is not as large as for diesel because gasoline is less energy-intensive than diesel fuel.

However, CNG may not work for the ordinary car, because the fuel tanks either take up much of the passenger and trunk space or the vehicle range is limited. So there would be a cost penalty for methanol-car buyers compared to no fleet program. If methanol turns out to be a cleaner fuel, there would be a commensurate benefit in reduced emissions. Assuming 9 cities for private fleets and 40 for Government fleets, some 400,000 cars per year might be involved, give or take a lot because the data base is very poor. At \$150 per car first cost difference and about \$50 per year in added fuel costs (10 cents per gallon at 500 gallons per year), this would be about \$80 million per year as a rough guesstimate.

In the House bill, the initial fleet performance requirement offers a significant opportunity for natural gas-fueled vehicles to generate tradeable emissions credits, since those vehicles appear to be able to do much better than the standard. If this turns out to be true, net social cost of this requirement will be reduced significantly compared to the Senate version, within which credits are likely to be limited to those who buy more vehicles than mandated, because vehicles cleaner than mandated will be hard to come by.

It is likely that the second phase of the House bill, effective in 2000, could be met only by M100 [100% methanol], CNG, or LPG. Tradeable credits appear to be available only from additional vehicles rather than cleaner ones. The CNG economics would be the same as for the mid-1990s; the issue is whether the overall emission reductions can be achieved with only CNG vehicles (likely to be larger vehicles) or whether other alternative fuels for use with smaller vehicles will also be needed. If so, the cost will depend on whether M100 vehicles can be produced at costs equivalent to gasoline-fueled ones and how much methanol will cost. Both are as imponderable for 2000 as they are for 1995; the estimate for 1995 for methanol is probably close for 2000.

The House bill permits additional areas to become involved. If they do, costs will rise in proportion to the enlargement of the program scope.

In the meantime, California would be proceeding along its own path, perceived at this time as mandating similar fleet requirements plus diffusion of alternative-fueled passenger cars into the general auto market. California appears to believe that M85 [85% methanol] would be the fuel of choice for the foreseeable future—or until at least 2005. Since those action would be at California's initiative, it is probably not appropriate to include their costs in this discussion.

The largest potential costs would not necessarily be those estimated above. There is the possibility that the cars will not live up to either the warranty requirements or the customers' views of how the cars should perform. Recall costs could rise significantly, particularly in the early years of production. Buyers might turn away from the producers whose alternatively-fueled vehicles gave them the problems.

The way the House bill is currently structured, the number of cars involved is modest, and the customers (besides California) are fleets, whose owners might not react as negatively to the producers of the troublesome cars as the public at large might. However, the possibility exists that additional areas can become involved and alternative fuels might be extended to the nonfleet, general passenger car market as it will be in California, if State officials so decide and EPA certifies that the vehicles and fuels are available. EPA's definition of "available" might or might not take into account, to the producers' satisfaction, the uncertainties associated with warranty and customer satisfaction. This uncertainty causes the auto producers considerable concern, leading them to prefer a gradual introduction of the new technologies and fuels. Should the program be accelerated or expanded by floor amendments, this concern would be heightened.

The aggregated cost outlook

The costs discussed briefly above are pictured in Figure 4. The very wide range results from uncertainties as to whether specific provisions will be implemented as well as to the magnitude of the costs of those that are implemented. The estimates do not include any costs for alternative fuel program enlargement.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

TITLE III: AIR TOXICS ⁸

Costs associated with Title III of H.R. 3030 are described in Figures 5 and 6. As noted in the figures, existing sources of air toxics would be regulated beginning in the year 1995, with additional requirements phased in between 1995 and 2003. ⁹

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The cost estimates presented for this Title are CRS modifications of EPA cost data. (Our estimates were originally derived for a March 1, 1990 CRS memorandum, "Estimated Cost of Controlling Air Toxics," which is enclosed.) In general, the cost estimates used here are identical to those of the earlier memorandum, with two exceptions: first, the cost of mobile source air toxic controls was removed, since those costs are incurred in Title II of the House bill; second, an additional \$78 million was added to the cost of the House bill to adjust for the Energy and Commerce Committee's inclusion of a requirement that all major source categories of air toxics be regulated.

The costs presented are based on EPA's "best estimates," but the reader should note that there is a substantial degree of uncertainty in these estimates for several reasons, including lack of data on the numbers of sources and the volume of emissions to be controlled, uncertainty concerning the technologies to be used, lack of data on the cost of the technologies, and other factors. EPA addressed these uncertainties by providing a range of estimates (from—75% to +200% in the year 2003). A range this large means that the cost estimates are very uncertain in EPA's view, a point with which we agree.

Nonetheless, using best estimate data, the cost estimates range from \$935 million annually in 1995 to slightly more than \$4 billion annually in 2003 and later years. The largest cost is associated with Maximum Achievable Control Technology (MACT) standards for major sources and Generally Available Control Technology (GACT) standards for area sources. These costs total nearly \$2.5 billion annually (excluding costs to utilities) in 2003. ¹⁰

The other two categories of cost are MACT standards for utility boilers and accident prevention, detection, and response. The latter, which we estimated (using EPA data) to cost nearly \$800 million annually, are mandatory and take effect in 1996. The utility standards, at an estimated cost of \$750 million annually, are discretionary, but regulations are considered likely by most analysts. The year 2000 was chosen as a best estimate of the first year of impact for utility MACT standards: the requirements could affect existing sources as early as 1998, but could also be delayed well beyond the year 2000.

Costs of two other discretionary provisions were not estimated. The first is the Great Lakes provision, which allows the Administrator to promulgate further emission standards or control measures to prevent adverse health or environmental effects associated with deposition of air toxics in the Great Lakes. The bill requires a report to Congress on the subject within five years, following which the Administrator may issue regulations. We will not know whether such regulations will be issued and if so, what sources might be affected, until at least 1995.

The second provision not costed is the residual risk provision. This requires a report to Congress with recommendations for further legislation within 8 years of enactment. In the absence of further Congressional action, the provisions of current law would remain in effect. Thus, there is no additional cost.

TITLE IV: PERMITS ¹¹

Title IV of H.R. 3030 establishes a comprehensive new program in the CAA, requiring that sources of air pollutants obtain operating permits and requiring that States administer the permit program. Fees would be required. Impacts from the permit provisions in Title IV would begin to affect EPA within the first year of enactment. Impacts on States and sources subject to the permit provisions would begin to occur beginning in the second and fifth years, respectively, as outlined below. A profile of requirements is illustrated in Figure 7.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Impacts on EPA

Impacts of the permit provisions on EPA are three-fold. First, during the first 12 months following enactment, EPA must develop and issue regulations establishing minimum requirements for State permit programs. Second, between years 3 and 4 following enactment, EPA will review and approve or disapprove permit programs submitted by States, pursuant to these regulations. (The bill gives EPA 12 months to review State permit programs.) Third, beginning at the end of the fifth year following enactment (or, some time during the sixth year), EPA will be reviewing permits which States are proposing to issue (assuming that EPA does not utilize waiver provisions included in the bill). Finally, since permits are to be issued for periods not to exceed five years, EPA can be expected to experience impacts of reviewing a large number of permits proposed to be renewed by States at least every five years. A lesser number of permit reviews for new sources would occur at any time. Provisions of the bill granting EPA discretion to require States to reopen permits for cause could have limited impact on EPA resources, depending on the Agency's implementation of the provisions, but are likely to be small and intermittent.

Impacts on States

Impacts on States would include those activities to develop and implement the permit program itself, and those actions necessary to implement the required permit fee. First, during the second and third years following enactment (after EPA issues the regulations described above), States must develop and submit for EPA approval their applications for permit programs. Under the bill, these programs are to be submitted within three years of enactment, and EPA has 12 months to approve or disapprove. Once approved, sources have 12 months to begin submitting permit applications. At the end of the fifth year following enactment, States would begin to receive and review permit applications. It is difficult to estimate the amount of time, and resource burdens, that States would experience in reviewing permits. The bill apparently does not prescribe a time limit for a State's review; instead, it calls for "expeditious review of permit actions, including applications." Since permits are to be issued for periods not to exceed five years, permit review impacts would recur at least every five years. A lesser number of permit reviews for new sources would occur at any time.

In addition, the bill requires States (or EPA in lieu) to collect fees with the permits. In general terms, it is unclear how the Federal permit and fee requirements will expand, complement, or conflict with ongoing State permitting activities. As of 1987, 42 States had authority to collect permit fees, and more than 30 were doing so. Some that now have permit programs for operating sources (including Ohio, Minnesota, Kentucky, and about 20 others) may have little problem in this regard. A number of States with no air pollution permit and fee programs (for example, Georgia, Iowa, Montana, Rhode Island, and Nebraska) or construction permit programs only (such as Connecticut and Missouri) are likely to have greater start-up difficulties.

In addition, activities covered by existing permit and fee programs vary widely. Many are not as extensive as the program outlined in H.R. 3030. Many States are likely to need to change the basis for fee collection (existing State fees often are based on a fixed rates, according to the size of the source). New or amended State enabling legislation may be required in some cases, a process that can take one or two years, depending on a State legislative's schedule.

States presumable monitor air pollution sources and carry out numerous other activities to implement the Clean Air Act. The permit provisions of H.R. 3030 would not appear to add significantly to those existing requirements. Indeed, the permit provisions would have some favorable impacts on States, since the permit fees to be paid by applicants are to be retained

by States for use in supporting the air pollution control permit program of the State or interstate air pollution control agency. Depending on requirements of EPA or State regulations, States could begin to receive revenues from permit fees by the end of the fifth year following enactment.¹² Under the bill, permit fees are to be paid annually, but the equivalent could be paid over some other period. With such discretion, it is difficult to assess whether States would be likely to receive a fairly predictable stream of revenues from permit fees every year or a larger amount of revenues, but only every five years.

Impacts on sources

Impacts on owners and operators of permitted sources will be two-fold. First, assuming that State permit programs are approved by the end of the fourth year following enactment, sources have 12 months to submit permit applications. Under this schedule, permit applications would be due by the end of the fifth year. Prior to that time, source owners and operators would be required to develop all of the information needed as part of the application, including a plan describing how the source will comply with all applicable requirements under the Act.

The second major impact on sources would be the requirement to pay permit fees. Depending on requirements of EPA or State regulations, sources could begin paying permit fees to States by the end of the fifth year when applications are submitted and, in all likelihood, annually thereafter. How permit fee cost will affect individual sources will depend on the amount of emissions by that source and other emitting the same pollutant.

Once a permit has been issued, sources will be required to maintain the monitoring and recordkeeping required by an operating permit and to submit progress reports on compliance at least every six months, or period certifications, once the source is in compliance. Like the permit fees, these reporting and recordkeeping requirements would extend over time.

TITLE V: ACID PRECIPITATION^{1 3}

Time can influence the cost of acid rain control in two ways. First, there is the profile of costs over time as reflected by the bill's various control requirements. The Committee-passed bill is divided into two discrete phases; hence, substantial impacts would be initiated in those years (1996 and 2001). In addition, the program has a continuing long-term cost in terms of maintaining the emissions cap. Second, if a utility chooses to use a technological means of control, the cost recovery has a time profile. As illustrated in Figure 8, rate impact on consumers is greatest in the first year of capital recovery, but declines in future years as the equipment depreciates. Against this investment recovery time profile is that for low-sulfur coal which may be constant, escalating or declining over time depending on the market and contractual arrangements. Because of data constraints and uncertainty about utility compliance strategies, this discussion will focus on the time profile of the annual costs (on a levelized basis) resulting from the title's control requirements, rather than the time profile of the utilities' cost recovery.^{1 4}

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

By the same token, assuming the tonnage reductions required, the time frames involved, and the techniques used are roughly equivalent, attempts to distinguish meaningful aggregate cost differences between acid rain bills are spurious. The real uncertainty regarding the cost of techniques (low-sulfur coal, scrubbers, clean coal technology), utility compliance strategies, and future economic and energy demands dwarf any meaningful distinctions between the bills. The broad range represented in Figure 9 attempts to provide some indication of this uncertainty. However, it does not represent the complete range of potential future cost paths, such as maximum utility overcontrol in Phase 1 to soften the effects of Phase 2.

Phase 1 impacts

Most utilities will have no compliance costs in Phase 1, unless they voluntarily choose either to reduce early, or to phase in their Phase 2 compliance costs. Control requirements in Phase 1 are restricted to the 100+ plants listed in the bill or their

substitutes. Hence, the rate impacts on a nationwide basis will be minimal under Phase 1, although significant in certain utility systems.

Though utilities affected by Phase 1 will begin incurring costs shortly after enactment, costs to consumers will begin appearing in 1995, 1996, or 1997 depending on how the utility responds to various incentives in the bill. Cost impacts to consumers will begin in 1995 for utilities choosing to use the "early reduction" provision of the draft examined. However, the draft reviewed requires utilities to repay allowances gained (from early overcontrol) at a later date, lessening some of the incentive effects. Also, it is unlikely that a utility would gain more than a year of early reduction because of the planning, designing, construction, and shake-down phases of scrubber installation. These points combine to suggest that the early reduction provision may result in only about 5 Gw of scrubbers being installed, and that general level of response is indicated in Figure 9. However, utilities may react to the allowance system in such a way as to stimulate the early construction of scrubbers, resulting in greater use of the early reduction provisions, and greater costs than indicated in Figure 9.

More costs will be incurred in 1996 when compliance for utilities using fuel substitution as a compliance strategy are required to meet the 2.35 lbs. SO₂ per mmBtu standard of the bill. Utilities choosing a fuel-switching strategy could choose either to completely convert the facility to 2.35 lbs. coal or to blend their current high-sulfur coal with 1.2 lbs. coal in anticipation of fully converting in Phase 2. The three DOE facilities are also required to meet a 0.5 lb. standard in 1996. As indicated in Figure 9, costs are anticipated to rise in 1996, although remain under \$1 billion annually.

The final increase in costs from the Phase 1 requirements will occur in 1997, when utilities choosing to install technology and take the 1-year delay come into compliance. It is anticipated that between 10–15 Gw may take this option (in addition to the 5 Gw already installed under the early reduction provisions). This level of scrubbing would bring Phase 1 cost under the Committee bill to around \$1 billion. If lower-cost clean coal retrofit technology, such as low-temperature in-duct injection, was installed, or if less FGD was installed than estimated, the costs could remain substantially below \$1 billion—around the \$0.6–\$0.7 billion range. If more scrubbing occurs than is anticipated, then costs could exceed \$1 billion, although other costs, either fuel switching or Phase 2 compliance, would decline.

Phase 2 impacts

Phase 2 requirements greatly widen the number of utilities affected by Title V, although utilities, particularly western utilities, escape any compliance costs in Phase 2. The costs of Phase 2 are uncertain given the flexibility of the bill and utilities' responses. Based on EPA studies of similar provisions in other bills, which we found to be credible in previous CRS reports, and adding a range of uncertainty around the cost estimates, costs in the year 2001 may be in the vicinity of \$3.3–\$4.7 billion annually (excluding units choosing to extend the deadline to repower). Uncertainty about actual utilities' responses to the bill's mandates make a narrowing of this range impossible. Indeed, as with the discussion of Phase 1 costs, there are plausible compliance scenarios which lie outside the range presented here. Continuing on the previous example of overcontrolling in Phase 1, Phase 2 costs would be less if utilities chose to use their banked up allowances to ease the transition during Phase 2. Such an occurrence would smooth out the sharp peak in costs indicated for 2001.

Clean coal technology extension impacts

A review of the studies indicates that under some scenarios, the peak costs for acid rain control would be in 2004 when the units that repower with clean coal technology are required to be in compliance. As indicated in Figure 9, compliance costs in that year could exceed \$5 billion annually. Whether this is the case depends on how many utilities choose to repower existing facilities under the extension provided in the bill, and the actual growth in new coal-fired electric generation capacity that would require offsets. The estimate presented in Figure 9 represents a range indicated by EPA analyses with an additional band of uncertainty added by CRS to reflect the potential for the increased range of clean coal technologies available under the Committee's bill that was not included in the President's bill.

Post-compliance costs

As emphasized earlier, attempts to estimate post-compliance costs beyond 2000 are speculative at best. One can discuss the general shape of the cost profile, but any attempt at rigor would only hide the inherent uncertainty of the estimate. Various computer runs by DOE's screening model indicate that the long-term cost profile under H.R. 3030, as introduced, is a declining curve. Figure 10 is the result of one series of runs. There is no reason to believe that the bill reported by Committee (as well as the Senate-passed bill) would not have a similarly shaped distribution of costs across time.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

One possible change in the costs attributable to the Committee bill as compared to the Administration's bill is that the peak may occur earlier in the reported bill than in the President's proposal. This is because the Committee provides incentives for gathering allowances earlier (early reduction credits, 2 for 1 technological controls). To maximize value, these allowances should be used during the years of greatest scarcity which the models project will be the 2000–2010 period. Hence, if utilities used their banked allowances optimally, the peak may occur earlier than the 2010 indicated in DOE's analysis of the President's bill. This possibility would be even stronger in the Senate-passed measure which provides considerably more allowances (by moving up the Phase 2 deadline) for use in the 2000–2010 time period.

DISCUSSION OF THE COMMITTEE BILL (H.R. 3030) and Title-by-Title Analysis

Title I: Provisions for Attainment and Maintenance of National Air Quality Standards

INTRODUCTION

Title I of H.R. 3030 amends or restates many of the Clean Air Act's generic provisions for the attainment and maintenance of the NAAQS, including those relating to SIPs, transportation, and sanctions, and adds more specific provisions for ozone, CO, and PM-10 nonattainment areas. The title also adds new Federally enforced provisions regarding consumer and commercial products, the control of emissions from vessels, inspection and maintenance of motor vehicles, and control technique guidelines.

Under Section 108 of the Clean Air Act, the EPA Administrator is required to prepare criteria documents for pollutants which come from numerous or diverse sources, and which may reasonably be anticipated to endanger public health or welfare. These documents, which describe in detail the health and welfare effects of the pollutant, are the basis for setting NAAQS.

The NAAQS are established under Clean Air Act Section 109 at a level which, allowing for an ample margin of safety, protects the public health. There are six pollutants that have NAAQS: small particulate matter (formerly as total suspended particulate (TSP) and now as PM-10, which emphasizes the smaller particles), SO₂, CO, NO₂, ozone (O₃), and Pb. It is important to note that the discussions of ozone in this report refer to ground level, or tropospheric, ozone and not to stratospheric ozone. Ozone in the stratospheric miles above the Earth, is a beneficial screen from the sun's ultraviolet rays. Ozone at ground level, in the air we breathe, is a health and environmental concern.

BACKGROUND

The provisions of Title I are extremely important because many of the Nation's cities, as well as rural areas, currently have pollution levels that exceed EPA's health-based NAAQS for one or more of the criteria air pollutants. More than 100 different urban areas currently violate EPA primary air ambient standards for one or more pollutants, particularly ozone.

SUMMARY OF TITLE I

As already stated, failure to attain the NAAQS is a particularly serious problem with regard to three criteria air pollutants: ozone pollution (also called “ozone smog”), small (less than 10 microns) particulate matter pollution (also called PM-10 pollution) and CO pollution. EPA’s most recent evaluation of air quality trend data concludes that over 25 million Americans now live in counties violating the particulate matter standard, while almost 30 million reside in counties that violate the CO health standard, and about 112 million Americans live in counties that exceed the health standard for ozone smog. In providing these population data, EPA also said:

These population estimates are intended to provide a relative measure of the extent of the problem for each pollutant. The limitations of this indicator should be recognized. An individual living in a county that violates an air quality standard may not actually be exposed to unhealthy air. For example, if CO violations were confined to a traffic-congested center city location during evening rush hours in the winter, it is possible that an individual may never be in the area, or may be there only at other times of the day or during other seasons. However, it is worth noting that ozone, which appears to be the most pervasive pollution problem by this measure, is also the pollutant most likely to have fairly uniform concentrations throughout an area.

In addition, it is important to observe that, according to EPA’s Administrator William K. Reilly in a December 22, 1989 letter to the Committee, the direction of the trend in ozone levels for 1989 appears to be “much lower than those of 1988.” He said:

In our February 17, 1989 Press Release of the preliminary 1988 data, we said that the primary reason for the increased ozone levels may well be the hot, dry weather of the summer of 1988, which was particularly conducive to the formation of ozone, especially in the Eastern United States.

We are assembling preliminary 1989 data and are currently reviewing these data. The direction of the trend in exceedances you provided is consistent with 1989 ozone levels being much lower than those of 1988. This is what we would expect, based on data from the National Climatic Center. These data indicate that in 1989 excessive rain replaced the drought as the weather phenomenon of the year. In the rain-soaked East, the period from January through July was among the wettest on record in nine states. Maryland had more rain from January through July 1989 than in any other January through July period in the last 95 years. Only 1 year in the last 95 was wetter than 1989 in Delaware, Pennsylvania, Tennessee and West Virginia. Only 2 years were wetter in New Jersey and North Carolina, only 3 in Kentucky and only 4 in Ohio. This would suggest that the single year 1989, by itself, may not be an appropriate benchmark to characterize typical ozone levels.

The effect upon nonattainment determinations remains to be seen. These determinations are based on 3 years of data, consistent with the statistical form of the National Ambient Air Quality Standard (NAAQS) for ozone. Thus, the impact of the wet summer of 1989 on the number of nonattainment areas may be minimal. It is important to note that 1988 is not the first year that was viewed as being unusually conducive to ozone formation. Similar views were expressed about 1983. One advantage of our multi-year approach for the ozone NAAQS is that it provides a means for allowing for events that do not happen every year but can still be expected to recur.

Finally, the EPA Trends Report for 1988 shows that during the 10-year period 1979–1988:

Ambient smog levels increased two percent.

Lead levels in the atmosphere decreased 89 percent.

Sulfur dioxide ambient levels decreased 30 percent.

Ambient carbon monoxide levels decreased 28 percent.

Ambient particulate (dirt, dust, soot) levels decreased 20 percent.

Nitrogen dioxide ambient levels decreased seven percent.

EPA also tried to show some historic perspective as follows:

A 10-year time period is convenient for considering ambient air pollution trends because monitoring networks underwent many changes around 1980. However, it is important not to overlook some of the earlier control efforts in the air pollution field. Emission estimates are useful in examining longer term trends. Between 1970 and 1988, lead clearly shows the most impressive decrease (–96 percent) but improvements are also seen for total suspended particulate (–63 percent), sulfur oxides (–27 percent), carbon monoxide (–40 percent), and volatile organic compounds (–26 percent). Only nitrogen oxides did not show improvement with emissions estimated to have increased 7 percent, due primarily to increased fuel combustion by stationary sources and motor vehicles. It is also important to realize that many of these reductions occurred even in the face of growth.

Nevertheless, we should not lose sight of the fact, as already noted, about 121 million people reside in U.S. counties which did not meet “at least one air quality standard during 1988.” There is much yet to be done to achieve attainment of the NAAQS in these countries.

Ozone air pollution

One hundred and one of the Nation's urban areas violated the Clean Air Act health standard for ozone in 1988. The highest ozone level violations are found in Southern California, with New York, Houston, and Chicago also on the list of major cities with severe ozone problems. Several other areas have ozone levels that exceed the standard by more than 50 percent. Ozone violations have been especially frequent along the Eastern seaboard and in California. This was particularly true in the hot and dry summer of 1988, when violations occurred about once every three days.

EPA's list of areas violating the ozone standard as of 1988 is provided in Table 1. The primary ozone standard, established to protect human health, is a daily maximum hourly concentration of 0.12 parts per million (ppm). Compliance with the ozone standard is evaluated on the basis of a “design value,” which is the fourth highest one-hour ozone reading over three years. The three-year design value is utilized in order to minimize reliance on the ozone levels recorded in a single, perhaps aberrational, year.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The ozone compound.—Ozone (O₃) IS A PHOTOCHEMICAL OXIDANT AND A HIGHLY REACTIVE GAS THAT IS ONE OF THE PRIMARY CONSTITUENTS OF SMOG. CHEMICALLY, OZONE IS A FORM OF OXYGEN COMPOSED OF THREE ATOMS, AS COMPARED TO OXYGEN GAS WHICH HAS TWO ATOMS. THE THREE ATOM ARRANGEMENT IS BY NATURE UNSTABLE. IN A PROCESS KNOWN AS “OXIDATION,” THE EXTRA OXYGEN ATOM IN THE OZONE MOLECULE HAS AN AGGRESSIVE TENDENCY TO REACT WITH AN EXTREMELY WIDE VARIETY OF SUBSTANCES.

The oxidation reaction is extremely corrosive. This reaction causes metals to rust; it also cracks and fades paints, dyes and rubber products. This corrosive character is largely responsible for ozone's adverse health and environmental effects.

Health impacts of ozone pollution.—Ninety percent of the ozone breathed into the lung is never exhaled. ¹ Instead, the ozone molecules react with sensitive lung tissues, irritating and inflaming the lungs. This can cause a host of negative health consequences, including chest pains, shortness of breath, coughing, nausea, throat irritation, and increased susceptibility to respiratory infections. ²

These negative effects have been observed in healthy, exercising individuals at concentrations below the level of the Federal health standard.³ The intensity of the acute response increases as ozone levels rise, and as respiration rates increase. Vigorous exercise, which leads to heavier breathing, is likely to increase the health impacts of exposure to ozone. The problem is exacerbated because the warm sunny conditions most conducive to ozone formation are also most attractive for outdoor activity.

Some scientific evidence indicates that over the long term, repeated exposure to ozone pollution may scar lung tissues permanently.⁴ Researchers explain that the build-up of scar tissue stiffens the lungs, reducing their capacity and, in effect, prematurely aging the respiratory system. Ultimately, emphysema or lung cancer may result. Whether this occurs at ozone levels currently found in the ambient air in urban areas is unknown.

Young children may be especially vulnerable to both the acute and the permanent effects of ozone pollution.⁵ This is because their small airways are more easily obstructed by the inflammation ozone causes. Two other factors compound the risk to children. First, a child's more rapid breathing tends to draw ozone deep into the lungs. In addition, children's lungs are often already compromised by their high rate of respiratory infections.

Persons with respiratory diseases are especially vulnerable to ozone pollution, such as individuals with asthma or emphysema. Studies of asthmatics living in polluted areas have found that asthma attacks tend to occur more frequently as ozone levels rise;⁶ although a recent report by the OTA entitled "Catching our Breath" states that most laboratory studies "have shown no special effects in asthmatics."

Health researchers are also concerned that ozone pollution increases the lung's susceptibility to acute and permanent injury from exposure to the sulfuric and nitric acids which can also be present in urban smog.⁷ Such interactions among air pollutants are poorly understood, and are now under study.

This array of health effects, combined with recent extremely high ozone levels, has generated great concern among air pollution health effects experts. In testimony before the Health and the Environment Subcommittee in February 1989, Dr. Thomas Godar, President of the American Lung Association, termed the ozone levels of 1988 a public health "disaster."⁸ Others have not used that term. The OTA report states (p. 40):

Although the short-term effects are important, many health professionals are more concerned that repeated exposure to ozone over a lifetime may result in permanent impairment of the lung. Since ozone damages the tissues lining the airways of the lung, it has been hypothesized that ozone exposure could contribute to the accelerated aging of the lung, retardation of lung development in children, or the development of pulmonary fibrosis, a chronic lung disease. However, research is just beginning to shed light on questions about the possible long-term effects of ozone exposure. We are not yet able to confirm or dismiss many of the concerns about these effects.

At the same time, OTA's report points out that not all of the more than 100 million people in ozone affected counties are threatened especially (pp. 6-9):

Ozone in a city's air, however, does not necessarily equal ozone in people's lungs. Concentrations vary with time of day and exact location. People vary in the amount of time they spend indoors, where concentrations are lower. And the more actively someone exercises, the more ozone he or she inhales. Each year, nationwide, an estimated 34 million people are actually exposed to ozone above 0.12 ppm at low exercise levels, and about 21 million are exposed during moderate exercise, on average about 9 hours per year. About 13 million people are exposed to ozone above 0.12 ppm during heavy exercise, each of them for about 6 hours each year, on average. At each exercise level, one-quarter of these people live in the Los Angeles area.

It is important to remember that people have varying life-styles, not "average" ones. Those exposed to high concentrations at high ozone levels of exercise include some who choose to be outside and some who have no choice, the latter including

workers doing physical labor such as construction. About 5 percent of adult men work outdoors most of the time, and an additional 10 percent do so part of the time.

Children play outdoors for about 3 to 4 hours each day, on average, during the summer months when school is out and ozone concentrations are high.

* * * * *

So what would Americans gain by meeting the standard nationwide? In terms of acute effects, the Nation would avoid several hundred million episodes of such respiratory symptoms as coughing, chest pain and shortness of breath. Some people in the worst areas would experience dozens fewer incidents of respiratory symptoms each year, while many in other areas would experience no change. About 8 to 50 million days of restricted activity might also be eliminated. These are days when someone feels ill enough to limit the day's activities, if not necessarily to say in bed or home from work. Most of the benefit would be concentrated in high ozone areas such as southern California and the Northeast corridor cities.

The Committee believes that those are significant "gains" and as research improves, there could be more. We must achieve the present standard.

Impacts on crops and vegetation.—Ozone pollution has been shown to damage many types of vegetation. ⁹ The pollution enters plant leaves through their gas exchange pores, in essence burning the cell membranes. EPA estimates indicate that ozone pollution levels common in many areas can reduce tomato yields by 33 percent, beans by 26 percent, and soybeans by 20 percent. ¹⁰ Other studies have shown that ozone levels below the Federal standard can cause wheat yields to drop by 30 percent. ¹¹ EPA has concluded that ozone causes annual crop losses of \$2 to \$3 billion per year. ¹²

Also, OTA points out that an "important source of uncertainty in agricultural benefits is the estimation of ozone concentration in areas across the country where crop production takes place." Baseline ozone concentration are estimated by "extrapolating both suburban and rural monitors to agricultural areas." In many States, "appropriate data are only available from one or two monitors, and significant errors are apt to be introduced by extrapolating from these data." (pp. 90-91).

Forests can be damaged through the same processes. Forest damages attributable to ozone pollution, including premature death and stunted growth, have been found in the San Bernadino National Forest in Southern California, and along the length of the Sierra Nevada mountains. ¹³ Ozone pollution is also a suspected cause of the widespread forest dieback occurring in high altitude forests throughout the East. ¹⁴ OTA's report states that "exposure to ozone has been established as the primary cause."

How ozone is formed.—Ozone is not emitted directly from smokestacks, tailpipes, or other pollution sources. Instead, it is a "secondary pollutant," formed from a large group of hydrocarbon pollutants called "VOCs" in conjunction with NO₅x EMISSIONS. THESE COMPOUNDS ARE RELEASED INTO THE AIR BY MOTOR VEHICLES, FACTORIES, AND NUMEROUS SMALLER SOURCES. THE POLLUTANT MIX COOKS IN THE SUN, PRODUCING OZONE THROUGH A COMPLEX CHAIN OF REACTIONS. THE HOTTER THE TEMPERATURES, THE GREATER THE FORMATION OF OZONE.

A typical ozone pollution episode involves a large stagnant air mass that allows pollutants to build up in the atmosphere. The polluted air mass slowly spreads downwind. For example, in the summer, such air masses commonly build-up over the urban areas along the East Coast, and move into New England. As the air mass moves, ozone levels often continue to increase. In part, this is because the pollutants have more time to react and form ozone. The addition of new pollutants, originating in areas passed along the way, is also an important factor.

This process can eventually bring high ozone levels to areas hundreds of miles downwind of the urban pollution sources. As a result, ozone pollution can be a problem even in very rural areas in the eastern United States. For example, in the summer of

1988 one of the most pristine areas in the eastern United States—Acadia National Park off the northern coast of Maine—recorded ozone levels so high that they would produce smog alerts if they occurred in downtown Los Angeles.¹⁵ Shenandoah National Park in Virginia also violated the health-based ozone standard in 1988.¹⁶

Sources of ozone precursors.—The two major sources of the ozone precursors (VOCs and NO₅x), ARE MOTOR VEHICLES AND INDUSTRY. OTA HAS ESTIMATED THAT IN 1985 THE MOST IMPORTANT SOURCES OF VOC EMISSIONS WERE “MOBILE SOURCES,” (CARS, TRUCKS, AND BUSES, WHICH RELEASE ABOUT 50 PERCENT OF NATIONAL VOC EMISSIONS), ORGANIC SOLVENT EVAPORATION FROM STATIONARY SOURCES SUCH AS DRY CLEANERS, PRINTERS, AND PAINT SHOPS (30 PERCENT), AND HOME FUEL COMBUSTION (12 PERCENT).¹⁷ (Home fuel combustion, however, tends to take place in cold weather, and not during ozone season.)

In many urban areas, transportation sources actually account for a larger percentage of the VOC emissions, over 50 percent, because of the high concentration of motor vehicles in city centers, and the relative absence of heavy industry.¹⁸ OTA also states (p. 116):

Total VOC emissions drop between 1985 and 1994 due to lower emission rates from cars and trucks. Although the number of vehicle-miles-traveled is forecast to increase in many areas over this period, the gradual replacement of current vehicles with newer, cleaner ones will result in an overall decline in highway vehicle emissions.

* * * * *

VOC emissions from highway vehicles are projected to decline by about 25 percent between 1985 and 1999. Stationary source emissions, on the other hand, are forecast to increase steadily between 1985 and 2004, showing a 10-percent increase by 1994 and a 23-percent increase by 2004, over 1985 levels. Growth of small (less than 50 ton-per-year) stationary VOC source emissions is one of the most important reasons why overall VOC emissions are not expected to decline more rapidly in the earlier years and why total emissions may show a net increase after 1999. This source category effectively offsets much of the emissions reductions realized from highway vehicles.

Thus, OTA has concluded that all of the different types of sources of VOC pollution must be controlled if America's cities are to achieve the ozone standard.¹⁹ The Committee agrees.

The other major ozone precursor is nitrous oxides (NO₅x), WHICH ARE ALSO A MAJOR CONTRIBUTOR TO ACID RAIN. NO₅x IS PRODUCED IN ALL FOSSIL FUEL COMBUSTION REACTIONS. THE PRINCIPAL SOURCES OF NO₅x EMISSIONS ARE MOBILE SOURCES, WHICH, ACCORDING TO OTA, ACCOUNT FOR ABOUT 35 PERCENT OF THE NO₅x INVENTORY, ELECTRIC UTILITIES BURNING FOSSIL FUELS (35 PERCENT), AND INDUSTRIAL FUEL CONSUMPTION (12 PERCENT).²⁰ NO₅x EMISSIONS FROM NATURAL SOURCES ARE “NEGLIGIBLE.” (P. 98).

Control of NO₅x IS IMPORTANT TO THE EFFORT TO REDUCE LEVELS IN SOUTHERN CALIFORNIA, WHERE VOC-ONLY EMISSION REDUCTION STRATEGIES FAILED TO LOWER OZONE LEVELS, WHILE A COMBINED PROGRAM OF VOC AND NO₅x REDUCTIONS HAS PROVIDED SIGNIFICANT GAINS.²¹ Along the East Coast, modeling by EPA indicates that NO₅x REDUCTIONS CAN HAVE IMPORTANT BENEFITS.²²

The VOC controls called for in the nonattainment and mobile source provisions (Titles I and II) of the Administration bill, when combined with the NO₅x CONTROLS AND REFLECTED IN THE TAILPIPE STANDARDS CONTAINED IN THE LENT SUBSTITUTE (0.4 G/MI) AS WELL AS UTILITY NO₅x ACID RAIN CONTROLS RESULT IN A DRAMATIC REDUCTION IN OZONE LEVELS THROUGHOUT THE GREATER NORTHEAST MODELING REGION. THIS COMBINED VOC/NO₅x STRATEGY IS MORE EFFECTIVE THAN THE COMPARABLE OR EVEN MORE STRINGENT STRATEGIES THAT CONTROL ONLY VOC. THE BENEFITS OF THIS STRATEGY

ARE MORE WIDESPREAD THAN SUCH VOC ONLY CONTROLS, NOT ONLY ENCOMPASSING ALL MAJOR METROPOLITAN CENTERS, BUT ALSO REDUCING OZONE EXPOSURES OF FORESTED ECOSYSTEMS IN THE APPALACHIANS AS WELL AS OF CROPLANDS IN OHIO AND ELSEWHERE.

In Southern cities, like Atlanta, with high natural or “biogenic” emissions of VOCs, NO₅x REDUCTIONS ARE GENERALLY MORE EFFECTIVE THAN VOC REDUCTIONS.^{2 3} However, there are some instances in which NO₅x REDUCTIONS CAN BE OF LITTLE BENEFIT IN REDUCING OZONE OR CAN BE COUNTER-PRODUCTIVE, DUE TO THE OFFSETTING ABILITY OF NO₅x TO “SCAVENGE” (I.E., PHOTOCHEMICALLY REACT WITH) OZONE AFTER IT FORMS.

Pollution trends—Significant success in reducing hydrocarbon emissions occurred between 1970 and 1982, when VOC levels dropped by over 25 percent. Since then, however, VOC levels have remained relatively flat, in part because many of the gains attributable to tighter tailpipe standards, as noted, have been reversed by a substantial increase in vehicle miles travelled since 1970. NO₅x EMISSION LEVELS INCREASED SLIGHTLY BETWEEN 1970 AND 1986, AND ARE EXPECTED TO CONTINUE TO RISE.

Overall, the ozone levels recorded in 1988 were the worst of the decade and in many areas the worst ever recorded.^{2 4} Air pollution experts have testified that, given estimates of growth in emissions from small stationary sources, and expected increases in the use of motor vehicles after the year 2000, ozone levels in future years are likely to increase in the absence of new pollution controls, beyond those provided under current law.^{2 5}

Carbon monoxide air pollution

EPA has established two ambient air quality standards for CO: a one-hour standard of 35 ppm and an eight-hour standard of 9 ppm.

There are 52 areas in the country—with a combined population of 30 million people—that violate one or both of these standards, according to the latest figures from EPA. These areas are listed in Table 2.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The nature of carbon monoxide pollution.—CO is a colorless, odorless gas. It is primarily a by-product of incomplete fuel combustion in cars, buses, and trucks. These transportation sources account for 70 to 90 percent of CO emissions in most urban areas.²⁶ Other sources are fuel combustion and industrial processes.

The geographic and seasonal factors that promote CO pollution contrast sharply with those that promote ozone formation. While ozone is largely a warm-weather problem, CO levels are generally highest during cold weather.

CO problems are especially exacerbated at high altitudes. Cold weather and high altitudes increase the level of CO pollution from motor vehicle exhaust, especially during “cold starts,” which last until the engine warms, because they reduce combustion efficiency.

Health effects.—CO pollution reduces the ability of blood to deliver oxygen to the body's tissues. It is a “mimic” of oxygen. When inhaled, CO binds with hemoglobin that would otherwise transport oxygen through the blood stream.

The Committee received testimony that because it reduces oxygen levels in the blood stream, carbon monoxide pollution can be especially hazardous to fetuses. The fetus cannot breathe on its own, and so relies on oxygen delivered through the mother's blood stream. The blood passing through the placenta to the fetus is naturally poorly oxygenated, because some of the

oxygen in the blood has already been used by the mother. The fetal brain, which has high oxygen requirements, is particularly susceptible to carbon monoxide damage.

The five million Americans suffering from heart disease are also especially vulnerable to CO pollution, because their circulatory systems have a limited capacity to transport oxygen to the body. Angina victims experience heart pains when oxygen levels reaching the heart are lowered.²⁷ According to health studies, they experience the onset of angina pain earlier when breathing CO.²⁸ Some experts believe that exposure to elevated levels of CO pollution trigger heart attacks.²⁹

Exposure to high levels of CO also pose risks for otherwise healthy individuals. As levels of CO in the blood stream rise and oxygen levels in the brain decline, people lose visual perception, manual dexterity, and learning ability. Reduced mental alertness can lead to increased vehicular accidents. At extremely high levels (such as those that can result from running a car in an enclosed garage), CO causes death by asphyxiation.

“Hotspots”.—CO pollution reaches its highest levels in areas where motor vehicle traffic is heaviest, such as busy intersections. Poor air circulation, such as in or near tunnels, also raises CO levels. These areas are called “hotspots.” Unlike ozone pollution, CO pollution generated in one urban area is generally not transported downwind to other areas. However, the Federal health standards are frequently violated over broad portions of the urban area.

According to EPA's Trend's Report for 1988, the for the 10-year period 1979–89 there was a 25 percent decrease in emissions of CO. “Emissions from highway vehicles decreased 30 percent ***, despite a 33 percent increase in vehicle miles travelled.” The report adds (p. 56):

This indicates that the Federal Motor Vehicle Control Program (FMCVP) has been effective on the national scale, with controls more than offsetting growth during this period. While there is general agreement between changes in air quality and emissions over this 10-year period, it is worth noting that the emission changes reflect estimated national totals, while ambient CO monitors are frequently located to identify problems. The mix of vehicles and the change in vehicle miles of travel in the area around a specific CO monitoring site may differ from the national averages.

Despite the progress that has been made, CO remains a concern in many urban areas. The characterization of the CO problem is complicated because of the growth and possible changes in traffic patterns that have occurred in many major urban areas. There are a variety of possible factors to consider, such as topography, meteorology, and localized traffic flow. The goal is to ensure that the monitoring networks continue to characterize the ambient CO problem adequately. However, these concerns should not overshadow the genuine progress documented over time in areas that have traditionally been the focus of the CO problem.

The PM-10 standard; small particulate air pollution

Roughly 25 million people live in areas that do not meet the Federal health standards for small particulate matter, which is commonly referred to as “PM-10.”³⁰

The original NAAQS for particulate matter was set in 1971. It was based on “total suspended particulates” (TSP)—in other words, any particles floating in the air. In 1987, EPA relaced the TSP standard with an ambient standard based on particles less than ten microns (millionths of a meter) in diameter. These PM-10 pollutants have diameters less than one-tenth the width of a human hair.

Unlike larger airborne particles, PM-10 pollution can pass through the natural filters in the nose, mouth, and throat, penetrate the upper airways, and travel deep into the lungs. It was for this reason that EPA concluded that PM-10 levels better measured risks to human health than did TSP levels (which encompassed particles as large as 50 microns).

Many different substances can be components of PM-10, including dust, dirt, soot, smoke, and "secondary particles." The latter are formed by the transformation of pollutant gases such as SO₂, NO_x OR VOCs INTO AIRBORNE PARTICULATES. IN AN APRIL 20, 1989 LETTER TO THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS OF THIS COMMITTEE, ADMINISTRATOR REILLY PROVIDED SOME HELPFUL INFORMATION ABOUT SECONDARY PARTICLES. HE WROTE.

Nitrates—Nitrate particles can be either emitted directly to the atmosphere or can be formed in the atmosphere from gaseous nitrogen oxides. Under certain conditions—cooler temperature, high humidity, and elevated concentrations of ammonium or other cations—high concentrations of particulate nitrates can be expected. These conditions can be found in several western cities including the South Coast area.

* * * * *

Sulfates—As with nitrates, sulfates can be either emitted directly into the atmosphere or can be formed in the atmosphere from sulfur dioxide. The highest sulfate levels generally appear in the East, although some western sulfate problems exist.

Carbonaceous particles—The emission and contribution of carbonaceous particles to the overall PM-10 concentrations is not well understood.

Combustion sources—The highest concentrations of carbonaceous particles come from combustion-type sources, such as residential wood combustion and open burning. These sources can cause problems for areas trying to attain the PM-10 standards.

Solvents—Most emissions from solvents and other volatile organic compounds (VOC's) are in a gas phase when emitted to the atmosphere. To contribute to the PM-10 levels in the air, the gaseous VOC would have to condense or would have to undergo chemical transformation into aerosol. In most cases, particulate matter from these processes does not occur in sufficient concentrations to result in a significant PM-10 problem.

Diesel fuel—Carbonaceous particles from incomplete combustion of diesel fuels can contribute to high concentrations of PM-10.

* * * * *

*** gaseous emissions of nitrogen can undergo chemical transformation in the atmosphere to form particulate matter. Particles formed in this manner are known as secondary particles. Since the particle formation depends not only on the emissions of precursors but also on the atmospheric conditions, the relationship between the control of the precursor emissions and the ambient PM-10 concentrations are site specific. Thus, no general relationship can be stated.

There are two Federal standards for PM-10 pollution: a 24-hour standard of 150 micrograms per cubic meter (6mG/M³) AND AN ANNUAL STANDARD OF 50 6mG/M³. IN 1987, WHEN EPA ADOPTED THE PM-10 STANDARD, IT ESTIMATED THAT AT LEAST 70 COUNTIES WERE LIKELY TO BE IN VIOLATION OF THESE STANDARDS. EPA RECENTLY ESTIMATED THAT 25 MILLION PEOPLE RESIDE IN PM-10 NONATTAINMENT AREAS.

These areas are listed in Table 3.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE
TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Health effects of PM-10.—High levels of PM-10 pollution can produce an array of adverse health effects, including temporary reductions in lung capacity, aggravation of pre-existing respiratory diseases, cancer, and even death.^{3 1}

Children may be especially vulnerable to PM-10 pollution due to their high respiratory rates and small lungs. A recent study in Utah found that hospital admissions for children with respiratory disease (pneumonia, pleurisy, and bronchitis) were three times higher than normal during months in which the Federal PM-10 pollution standards were exceeded.^{3 2} Other vulnerable populations include the elderly asthmatics, and victims of respiratory disease.

Certain types of PM-10 pollution pose special health risks. One especially troubling component of PM-10 pollution is the carbon-based particles that result from incomplete combustion in diesel engines. EPA has concluded that these particulates may cause as many as 860 cancer cases annually.^{3 3} Particulates from wood stoves have similar hazardous characteristics.

Sulfates and nitrates, also called acid aerosols, are another type of particulate. As noted, these are secondary particulates that form from emissions of SO₂ AND NO_x. ACID AEROSOLS CAN DAMAGE SENSITIVE LUNG TISSUES WHEN INHALED. ACCORDING TO OTA, THEY COULD CAUSE THOUSANDS OF EXCESS DEATHS EACH YEAR. OTA SAID:

To estimate damages caused by transported air pollution quantitatively, OTA used sulfate concentrations as an index of this "sulfate/particulate mix." The analysis projected a range of mortality estimates for a given population exposure level, in order to incorporate disagreements within the scientific community over the significance of sulfates to human health. While some researchers conclude there is a negligible effect, others have found a significant association, ranging up to 5 percent of the deaths per year in the United States and Canada attributed to current airborne sulfate/particulate pollution. Though further research and data are needed to resolve this controversy, this pollutant mix could be responsible for about 50,000 premature deaths per year (about 2 percent of annual mortality), particularly among people with preexisting respiratory or cardiac problems. If pollutant emissions remained the same through the year 2000, increases in population might cause slightly higher numbers of premature deaths; a 30 percent decrease in emission levels by 2000 might reduce the percentage of deaths annually attributable to air pollution to 1.6 percent (40,000 persons). In each of these cases, ranges of mortality are estimated to extend from zero deaths to about three times the number reported above.

Other small dust particles can also be hazardous, because they build up in the lungs over time and impair breathing capacity. The scientific data on these issues are, however, "uncertain and conflicting" as was noted by the court recently in upholding the agency's current PM-10 standard (see *NRDC v. EPA*, Case No. 87-1438).

Environment and welfare effects.—PM-10 pollution—especially PM-10 pollution less than 2.5 microns in diameter—impairs visibility. Along the East Coast, summer used to be the season of best visibility, but over the past 30 years it has become the season of worst visibility.^{3 4} EPA has linked this decline in visibility to PM-10 pollution. The National Park Service (NPS) reports that particulate pollution, especially fine sulfate particles, impairs scenic vistas within the National park system 90 percent of the time.^{3 5}

In an April 5, 1990 letter to the Committee, Secretary of the Interior Manuel Lujan, Jr., commented on this problem. He said:

Interior has certified to EPA that regional haze impairs scenic views at all 60 NPS monitoring locations at 60 sites in excess of 90 percent of the time. Fine particles less than 2.5 microns in diameter cause most of the visibility impairment in NPS units. Sulfates, which are fine particles of optimal size and configuration to scatter light, are the single most important contributor to visibility impairment in most park units except in parts of the Pacific Northwest, where carbonaceous materials dominate the fine particulate mass. In the Colorado Plateau area sulfates cause 40–60 percent of the man-made visibility impairment on the average, with organics also contributing significantly to the impairment. In Shenandoah National Park, sulfates cause over 70 percent of the impairment. Additional categories of fine particles that contribute to visibility impairment include nitrates, smoke, and soil. Sources of these pollutants include fossil fuel-fired power plants, smelters, painting, printing and coating operations, oil and gas fields and refineries, forest and agricultural burning, wood stoves, and motor vehicles.

* * * * *

The NPS has studied visibility in the Grand Canyon more intensively than in any other park. The addition of relatively small amounts of fine particle pollution can have a significantly greater impact on visibility in a relatively clear area like Grand Canyon, than in an area like Shenandoah National Park. Thus, although the Grand Canyon is blessed with some of the cleanest air in the National park system, the views are perceptibly degraded to various degrees by man-made pollutants on most days and are significantly obscured during multi-day visibility episodes. Sulfates are responsible for 40–60 percent of the man-made impairment at Grand Canyon on the average, and for virtually all of the impairment during these episodes.

PM-10 also soils materials and building surfaces. According to an EPA estimate, the damage could be up to \$1 to \$2 billion annually.^{3 6}

Sources of PM-10 pollution.—There are two basic sources of particulate pollution: natural sources and man-made sources. Within the broad category of man-made sources, there are three major subsets of sources: fugitive emissions (e.g., dust and dirt), direct emissions (e.g., diesel particulates and wood smoke), and secondary particulates (e.g., sulfates and nitrates). The particulate pollution in any given area may come from one of these principal sources—or it may come from a combination of them—depending on the area's special circumstances.

EPA has indicated, in a December 30, 1988 letter to the Oversight and Investigations Subcommittee, that it is difficult to identify and apply reasonable control measures to these so-called “nontraditional sources” of PM-10. EPA said:

Sources of PM-10, such as paved and unpaved roads, residential wood combustion, silvicultural and agricultural burning, and windblown dust from open areas are referred to as nontraditional sources because they are not sources such as boilers and smelters that were “traditionally” controlled to attain the NAAQS for total suspended particulates. Consequently, EPA and State and local agencies have less experience in their identification and control.

Emissions from open burning for silvicultural or agricultural purposes are difficult to quantify. As a result, significant uncertainty is introduced into traditional dispersion modeling approaches for evaluating the sources of the particulate matter pollution and for determining appropriate control measures. The EPA is urging States to use both receptor and dispersion models to determine the source contributions and develop control strategies. While receptor models are an important adjunct to the more customarily-used dispersion models and can assist in identifying similar particles, further complicating our efforts at identification.

Even when the sources can be identified, State and local agencies may find it difficult to adopt appropriate control measures. For example, road sanding is performed for safety reasons, but traffic can further reduce the sand to PM-10 size particles and disperse it into the air. Reasonable control measures seem to be available, such as the rapid removal of road sand when the weather permits and the use of sanding material which is less friable and contains larger particles. However, it requires careful planning to ensure that public safety is not compromised when implementing these measures.

Natural sources include wildfires, volcanoes, and windblown dust. According to EPA estimates, such natural sources generate roughly 80 million tons per year (tpy) of particulates; but much of this includes particles too large to be counted as PM-10 pollution.^{3 7} A significant portion of the natural particulate pollution is generated in isolated areas.

The man-made fugitive emissions come from sources such as roadway and construction dust. In the aggregate, fugitive emissions are a large source of particulate pollution (responsible for perhaps 125 to 385 million tons per year), but like the natural sources, a significant portion of these emissions are particles too large to be counted as PM-10 pollution.^{3 8} Like natural sources, fugitive emissions are also frequently generated in isolated areas.

The man-made direct emissions embrace a variety of sources, including emissions from large stationary sources, such as power plants and factories; emissions from small stationary sources, such as wood stoves; and emissions from mobile sources,

such as cars and trucks. The direct emissions of particulates amount to about 7 million tpy, with industrial processes (35 percent), fossil-fuel combustion (25 percent), and mobile sources (20 percent) being the largest contributors.^{3 9}

The final component of PM-10 pollution, secondary particulates, come primarily from SO₂ AND NO_x EMISSIONS. COAL-FIRED ELECTRIC UTILITIES ARE THE PRINCIPAL SOURCE OF SO₂ EMISSIONS, WHILE ELECTRIC UTILITIES, INDUSTRIAL BOILERS, AND MOBILE SOURCES ARE THE PRINCIPAL SOURCES OF NO_x EMISSIONS.

In its 1988 Trends Report, EPA discussed emissions trends as follows:

Nationwide TSP emission trends show an overall decrease of 22 percent from 1979 to 1988 which coincidentally matches the TSP air quality improvement. (See Table 3-1 and Figure 3-6). The trend in PM emissions is normally not expected to agree precisely with the trend in ambient TSP levels due to unaccounted for natural PM background and uninventoried emission sources such as unpaved roads and construction activity. Such fugitive emissions could be of significant magnitude and are not considered in estimates of the annual nationwide total. Due to delays in 1988 emissions data reporting, the impact of the massive forest fires which occurred in Yellowstone National Park, are also not reflected in the 1988 estimates. The 10-year reduction in inventoried particulate emissions occurred primarily because of reductions in industrial processes. This is attributed to installation of control equipment, and also to reduced activity in some industries, such as iron and steel. Other areas of TSP emission reductions include reduced coal burning by non-utility users and installation of control equipment by electric utilities that burn coal.

* * * * *

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Particulate emissions are reported to have decreased 7 percent from 1984 to 1988. This 5-year decline in inventoried sources may be overstated, somewhat, because the major forest fires in Yellowstone during the summer of 1988 have not been included in the 1988 estimates. Emissions from forest fires typically represent 10 to 14 percent of the national total. The estimate reported for 1988 is only 11 percent.

* * * * *

The observed year-to-year variations in particulate levels may in part be attributable to meteorology. Among all meteorological parameters, precipitation has been shown to have had the greatest influence on particulate air quality. Rainfall has the effect of reducing reentrainment of particles and of washing particles out of the air. Generally drier conditions are also associated with an increase in forest fires.

During 1988, most of the nation experienced an extreme drought. Nationally, this year was the driest since 1956 and the second driest in the last 50 years. While the total precipitation decreased 13 percent from 1987, one fifth of the States experienced decreases exceeding 20 percent. The dry conditions were most severe in the southern Atlantic States (VA, NC, SC), the Midwest (IL, IA, MO, KS, NE) extending southward (OK, TX) and included the West (CA, NV, AZ) and the Mountain States (UT, WY, MT, ND).

On a State-by-State basis, the largest decreases in precipitation were associated with the larger observed increases in TSP. Among those States with more than 20 percent decrease in precipitation (CA, IA, KS, NE, NV, OK, TX, UT, VA and WY), all except California, Texas and Wyoming increased in average TSP.

SECTION-BY-SECTION ANALYSIS

Section 101. General planning requirements

Section 101 of the bill while substantially amending the Clean Air Act to establish a somewhat different structure for State and EPA action following promulgation of new or revised NAAQS, also retains many of the provisions of existing law.

Designations generally.—Clean Air Act section 107(d) is revised to provide that after the Administrator promulgates a new or revised NAAQS, each State is required to designate each area within the State as nonattainment, attainment, or unclassifiable (if there is inadequate information to determine whether an area is in attainment or nonattainment) for the new or revised standard. At any other time, a State may designate any area of the State as nonattainment, attainment, or unclassifiable for any standard.

The State must submit the designations to the Administrator, who must promulgate them, making such modifications that the Administrator deems appropriate. If the Administrator intends to make a modification, the Administrator must so inform the State with at least 120 days of notice or explanation of the basis for the modification prior to promulgating the designation and provide the State an opportunity to show why the modification is inappropriate.

After promulgating a new or revised NAAQS, the Administrator must promulgate the designations for all areas of the country as expeditiously as practicable, and no later than two years after the promulgation, except that a one-year extension is available if the Administrator has insufficient information to make the designation.

Areas that the Administrator has designated under the current Clean Air Act section 107(d) retain their current designation.

Procedure.—To promulgate a designation or redesignation, the Administrator must publish a notice in the Federal Register. In the case of initial designations (including initial ozone, CO, and PM-10 designations required under the bill), this notice is not subject to notice and comment, but remains subject to judicial review. However, H.R. 3030 makes it clear that EPA should afford public notice and comment whenever possible.

Redesignation.—At any time, the Administrator may (on the basis of air quality data, planning and control considerations or any other air quality related considerations) notify a State that a redesignation of any area may be necessary. EPA must provide the information it has available to explain the basis for the notice. The State must submit any redesignation that it considers necessary within 120 days. The Administrator must finalize the redesignation within 120 days, making any appropriate modifications, after first giving the State an opportunity to respond to those modifications.

A State may, on its own motion, redesignate an area and submit the redesignation to the Administrator. The Administrator must then approve or deny the redesignation. The mere submission of a redesignation by the State, however, has no effect on the SIP requirements for the area.

The bill, for the first time, provides a procedure for redesignating an area in attainment. The Administrator can redesignate a nonattainment area to attainment only if (i) the area has attained the NAAQS; (ii) the area has a fully approved plan; (iii) the Administrator determines that the improvement in the air quality is due to permanent and enforceable reductions in emissions due to implementation of the plan (and Federal controls) and other permanent and enforceable reductions; (iv) the State has submitted, and the Administrator has approved, a maintenance plan for the area; and (v) the area has met all applicable requirements applicable to the area under the Act.

The Administrator may not redesignate any nonattainment area as unclassifiable.

Any reclassification of an ozone nonattainment area should be in accord with the specific numerical criteria applicable to the initial ozone classification under section 181.

New designations for ozone, CO, and PM-10.—Within 120 days of the enactment of the bill, each State must designate, affirm or reaffirm the designation of, or redesignate, all areas with respect to ozone and CO. Each State must submit the designations

or redesignations to the Administrator, who must promulgate them within another 120 days. The Administrator may modify the State's designations or redesignations, after first giving the State an opportunity to respond.

In the case of ozone or CO nonattainment areas classified under part D as serious, severe or extreme nonattainment areas and located within a metropolitan statistical area (MSA) or consolidated metropolitan statistical area (CMSA) as defined by the Bureau of the Census, the boundaries of such area are revised by operation of law within 45 days after classification of the area to include the entire MSA or CMSA. However, if within such 45-day period the Governor notifies the Administrator that additional time is required to evaluate the potential application of subclause 107(d)(4)(A)(v), which provides criteria for the exclusion of all or a portion of a metropolitan area from such designation, then such boundary revision shall occur by operation of law eight months after classification or 14 months after enactment, whichever is later, unless before that time the Governor makes the required finding that the area should be excluded in whole or in part, and the Administrator concurs.

Where the Governor has submitted such notification and EPA has delayed designation, the Governor, in consultation with State and local air pollution agencies, is to undertake a study of whether the entire MSA or CMSA should be included within the nonattainment area. The Administrator is directed to approve a State's request to exclude a portion of an MSA or CMSA if the Administrator finds, based on the State's demonstration, that sources in that portion of the proposed expanded areas do not contribute significantly to a violation of the NAAQS for ozone or CO. As a help in making this finding, the Governor and the Administrator are to consider factors such as population density, traffic congestion, commercial and industrial development, pollution transport and meteorological conditions.

A boundary revision under this provision shall apply for purposes of any SIP revision required to be submitted after the enactment of this paragraph.

The Committee believes the operation of law procedure is appropriate for seriously polluted areas because high pollution levels may be a result of the combined impact of all sources in a broad geographic area. Pollution levels may not decrease significantly unless control measures are applied to the entire area. Automobile inspection and maintenance, for instance, might be a less effective control strategy if it does not extend to vehicles in suburban areas within the MSA or CMSA where most of the residents commute regularly into the downtown area. However, the Committee emphasizes that the statutory test is that the broader area's sources contribute significantly to violation of the ozone NAAQS, not the effectiveness of control strategies for the existing nonattainment area or the consideration of the enumerated factors just discussed. It is the Committee's intent that EPA base its finding in terms of whether the expanded area or portion thereof contributes significantly to a violation.

The Committee anticipates, however, that where the CMSA or MSA encompass rural or even some suburban areas, such contributions may not contribute significantly to a violation and where this is so they should not be included. In these circumstances, improvement of control strategies may be more appropriate than expansion of the boundaries of the area. To deal with any exceptions, the bill provides an opportunity for areas or portions thereof to show they are not significant contributors to NAAQS violations.

Designations for PM-10.—The bill provides specific requirements for PM-10 designations: areas identified by Vol. 52 Federal Register 29383 (Aut. 7, 1987) as Group I areas (except as modified by EPA prior to the enactment of this bill), and areas that have recorded air quality monitoring data exceedances of the PM-10 NAAQS before January 1, 1989, are designated nonattainment by operation of law. All other areas are designated unclassifiable for PM-10 until redesignation.

Designations for lead.—The Administrator is authorized, at any time, to require a State to designate any area with respect to Pb.

General requirements for State implementation plans.—Section 101(b) of H.R. 3030 contains the basic requirements for SIPs, most of which parallel existing section 110(a)(2) of the Clean Air Act.

All SIPs or SIP revisions must be adopted by the State after reasonable notice and public hearing. Additionally, the requirements listed in the paragraphs of this subsection apply in whole or in part, as determined by the Administrator, to initial SIPs required by the Administrator after promulgating a new or revised NAAQS and to maintenance SIPs (as described below under subsection (c)); and apply in whole to SIPs required for nonattainment areas.

Section 110(a)(2) is amended to specify that each SIP must include:

(A) Enforceable emissions limits.—The SIP must include enforceable emission limitations, other measures (including economic incentives such as fees or auctions), and schedules and timetables for compliance that are necessary or appropriate to meet the applicable Clean Air Act requirements. The Committee notes that in the past SIPs have included measures for credit purposes that were later ignored by the States. As a result, lawsuits have occurred in States like New York and New Jersey to enforce these measures as commitments.

(B) Air quality data.—The SIP must provide for the establishment and operation of appropriate devices or systems to develop air quality data and for making the data available to the Administrator.

(C) Enforcement.—The SIP must provide for the enforcement of the emission limitations and other measures, and regulate stationary sources as necessary to achieve the NAAQS.

(D) Interstate air pollution.—The SIP must prohibit any source or other emissions activity from emitting air pollutants that will contribute significantly to nonattainment in another State, or interfere with measures required to be included in the SIP to prevent significant deterioration in air quality or to protect visibility; it also must enforce compliance with interstate and international pollution requirements of the Act.

(E) Adequate personnel, funding and authority.—The SIP must provide assurances that the State (or local or regional authority, if designated as the air pollution control agency) has adequate personnel, funding, and authority to carry out the SIP (including a statement from the attorney for the State, local, or regional authority that the State or local laws provide adequate authority); assure that the State complies with Clean Air Act requirements concerning conflicts of interest for members of State boards that approve permits or enforcement orders; and assure that if the State has delegated to a local or regional agency authority to implement the SIP, the State has retained ultimate responsibility for implementation.

(F) Monitoring and emission data.—The SIP must require (i) stationary sources, in accordance with EPA's guidance, to take necessary steps to monitor emissions, and (ii) the State to submit periodic reports concerning such emissions as well as to correlate such reports with emissions requirements. The SIP must also require the State to submit reports on other emissions-related data, in accordance with EPA guidance.

(G) Imminent and substantial danger.—The SIP must provide authority, including contingency plans, to restrict emissions of air pollutants that present an imminent and substantial danger.

(H) Revision of the standard.—The SIP must provide for revision of the plan as may be necessary to take account of revisions in the NAAQS or improved methods to attain the NAAQS, and to respond to findings by EPA that the plan is substantially inadequate to attain the NAAQS (a "SIP call"). However, the current provision that revisions to the plan are not necessary with respect to exemptions specified under section 110(a)(3)(C) (e.g., Federal facilities and temporary energy or economic authority) is continued.

(I) Part D requirements.—The SIP must meet the requirements of the nonattainment provisions of the Act (part D) if the area is designated nonattainment.

(J) Other provisions.—The SIP must meet the requirements, to the extent applicable, of the consultation provisions (section 121), the public notification provisions (section 127), and the provisions related to prevention of significant deterioration in air quality and visibility (part C) of the Act.

(K) Air quality modeling.—The SIP must provide for air quality modeling as EPA may prescribe, and submission of such data from such modeling to EPA, upon request.

In regard to this requirement here and elsewhere in the bill on modeling, it is critical that EPA and the States continue their efforts to develop superior techniques for monitoring, modeling and analyzing ways to improve control strategies to improve air quality. It is equally important that these improvements be incorporated into State and Federal plans and decisions as rapidly as possible.

(L) Permit fees.—The SIP must include provisions to require, under State law, stationary sources to pay, as a condition of a permit, fees to cover the reasonable costs of reviewing, acting on, and implementing the permit (except for court costs or the costs of enforcement action) until those provisions are superseded by the expanded permit fees requirement under Title IV of the Act (concerning permits).

(M) Consultation.—The SIP must provide for consultation and participation by local political subdivisions affected by the plan.

(N) Technical assistance for small sources.—The SIP must provide for a small source technical assistance program consistent with the requirements of Title IV.

(O) Permit program.—The SIP must contain a permit program meeting the requirements of Title IV.

EPA's finding of a State failure to include the required elements in its SIP submission shall result in the Administrator disapproving a SIP submission and may result in sanctions under section 179. Moreover, if the State fails to correct the deficiency resulting in such disapproval within two years after the disapproval, the Administrator must promulgate a Federal Implementation Plan correcting the deficiency under section 110(c). All of these requirements apply to SIP revisions as well as SIPs.

EPA action on plan submissions.—A new Clean Air Act section 110(k) is established outlining the requirements for EPA action on SIP submissions, including timetables, and the types of actions EPA is authorized to take.

Minimum criteria.—The Administrator is required in new section 110(k)(1) to promulgate minimum criteria for completeness that all plan submissions (except initial SIP elements submitted after promulgation of a new or revised NAAQS) must meet before the Administrator is obliged to approve or disapprove them. Within 60 days of EPA's receipt of a submission (but no later than six months after the date the SIP or revision thereof was required to be submitted), the Administrator must determine whether the submission meets those minimum criteria. If the Administrator determines that the submission (or part thereof) does not meet the minimum criteria for completeness, the State is treated as having failed to make the submission (or part thereof). If, however, EPA fails to act within the six months, the submission is deemed complete by operation of law.

Important to this provision is the requirement that EPA promulgate the minimum criteria for completeness so States will be apprised of EPA's concerns. Such objective criteria should help facilitate State submissions and avoid delays. With such criteria, the States should be able to pass the completeness test. EPA has begun such an effort by regulation in connection with current SIPs. That should be EPA's objective.

Time for EPA review.—Under new section 110(k)(2), the Administrator must act on each complete submission within 12 months of the determination of completeness (either by EPA or by operation of law), and must act on submissions not subject to the completeness criteria within 12 months of submission. Present law gives EPA only 4 months which history shows has been

too short. As a result of an investigation by the Committee and the GAO, EPA has recently developed new and streamlined procedures and internal delegations to shorten the time to act on SIPs and revisions. The Committee expects EPA to continue that effort.

Partial approval.—Section 110(k)(3) authorizes the Administrator to approve a submission in full, disapprove it in full, or approve it in part and disapprove it in part, depending on the extent to which it meets the requirements of the Act.

In the case of nonattainment areas, a partial disapproval shall subject the area to sanctions under section 179 and to the requirements of section 110(c). In other cases of partial disapproval, the application of section 179, but not section 110(c), is discretionary.

Conditional approval.—Section 110(k)(4) authorizes conditional approval of a SIP where the State commits to adopt such specific enforceable additional measures as EPA requires within one additional year. The conditional approval is to be automatically treated as a disapproval, subject to the sanctions of section 179 and the Federal Implementation Plan provision of section 110(c), if the State fails to comply with its commitment within the one year period.

SIP calls.—Section 110(k)(5) authorizes EPA to require a State to revise its plan whenever EPA finds that the plan is substantially inadequate to attain or maintain the NAAQS for any area, to mitigate interstate pollutant transport, or to otherwise comply with any requirement of the Act. EPA may establish a schedule for the State's submission of such a SIP revision, allowing no more than 18 months for such submission from the date of notice. In addition, EPA may adjust the dates for State action that would otherwise be applicable, if such adjustment is necessary.

Corrections.—Section 110(k)(6) explicitly authorizes EPA on its own motion to make a determination to correct any errors it may make in taking any action, such as issuing any designation or classification, or approving or disapproving any plan. This section is included to enable the Agency to deal promptly with errors in its actions. The basis for the determination and the determination must be provided to the State and the public.

Plan revisions.—New Clean Air Act section 110(1) requires that revisions to a SIP be adopted by a State after notice and public hearing. The Administrator must disapprove a SIP revision if the revision would interfere with any applicable reasonable further progress or attainment requirement or any other applicable requirement of the Act.

Sanctions.—New Clean Air Act section 110(m) authorizes the Administrator to apply the sanctions provided in section 179. If the Administrator makes a finding, disapproval, or determination under paragraphs (1) through (4) of that section that (i) the State has failed to submit one or more of the elements required for a nonattainment area meeting the minimum criteria in section 110(k)(1); (ii) EPA disapproves such an element submitted by the State; (iii) the State has failed to make any other required submission (including a maintenance plan), or EPA has disapproved such other required submission; or (iv) any requirement of an approved plan is not being implemented, a sanction applies as provided in section 179. The sanction may be applied to any portion of a State, subject to criteria established by rule by the EPA.

Savings clauses.—New Clean Air Act section 110(n) clarifies that certain requirements remain in effect during and after the transition from the requirements of the current Clean Air Act to the requirements of the Clean Air Act as amended by this bill.

New section 110(n)(1) clarifies that currently approved plan provisions remain in effect, until EPA approves a revision. If a State submits an original SIP for an area not designated nonattainment to provide for attainment of a NAAQS in effect prior to these amendments, that SIP must provide for attainment within three years of submittal. If a State received a notification (under current section 110(a)(2)(H)(ii), prior to the enactment of these amendments) that its SIP for an area not designated nonattainment is substantially inadequate, then a SIP revision submitted in response to that finding must provide for attainment within five years of the finding of inadequacy.

Construction bans now in place.—Section 110(n)(2) provides that any construction ban currently in place in any area (under existing law section 110(a)(2)(I)) due to failure to submit a new source review permit program, or failure to submit an approvable SIP providing for attainment or maintenance of the sulfur oxides NAAQS by December 31, 1982, remains in place until EPA approves a plan correcting those deficiencies. This provision does not affect construction bans not covered by this provision.

Federal facilities.—Section 101(e) of the bill amends Clean Air Act section 118, to waive explicitly immunity for Federal facilities from permit fees charged by the States (or political subdivisions thereof) that meet the requirements of title IV or that are reasonable service charges, as long as those fees or charges do not discriminate in favor of State, regional and local facilities.

Conformity.—Section 101(f) of the bill amends Clean Air Act section 176(c) to revise the framework for assuring that Federal actions conform to air quality plans under section 110. Under section 176(c), before any agency, department, or instrumentality of the Federal government engages in, supports, in any way, provides financial assistance for, licenses, permits or approves any activity, that agency has an affirmative responsibility to assure that such action conforms to the State or Federal implementation plan.

Section 176(c) is amended to clarify that conformity requires a showing of conformity to the plan's purpose of eliminating or reducing the severity of NAAQS violations, and achieving expeditious attainment of all the ambient standards, as well as a showing that the relevant activities, considering any growth likely to result, will not contribute to a failure to attain the standard, or delay timely attainment of the standard or achievement of interim emissions reductions, including any applicable emission reduction milestones.

The Administrator is directed within one year to promulgate regulations governing the determination of conformity under this section. In the case of individual projects or activities that are part of larger plans, it may not always be necessary that each individual project fully meets the conformity criteria on its own merits. An individual project may be found in conformity if the project is part of a larger plan of projects, provided the plan as a whole meets the conformity criteria and an enforceable commitment has been made to implement the larger plan.

The Administrator's regulations must insure, however, that Federal agencies do not selectively approve, fund, or build only the elements of an overall plan that increase emissions, as has sometimes happened under current law. The regulations should also insure that the conformity of a project is reassessed if its design changes significantly from that described in a conforming overall plan. Each State with an ozone or CO nonattainment area is required under these regulations to submit within 18 months of enactment a SIP revision containing for each nonattainment area criteria and procedures for assessing conformity.

Through the evaluation of the air quality impacts of proposed projects before they are undertaken, the conformity provision is intended to foster long range planning for the attainment and maintenance of air quality standards, and to assure that Federal agencies do not take or support actions which are in any way inconsistent with the effort to achieve NAAQS or which fail to take advantage of opportunities to help in the effort to achieve NAAQS.

The Committee expects that the new conformity provisions will be especially helpful in assuring that air quality considerations play a greater role in Federally supported transportation planning efforts, which can have a major impact on air quality and, in some severely polluted areas, are essential as part of the program for achieving NAAQS.

The Committee believes these changes are consistent with the report of the GAO, dated March 1990, entitled "Air Pollution—EPA Needs More Data from FHWA on Changes to Highway Projects," although it is not limited to such projects.

Section 102. General provisions for nonattainment areas

This section of the bill amends part D of the Clean Air Act to include five subparts that provide (i) general requirements for all nonattainment areas, (ii) specific requirements for ozone nonattainment areas, (iii) specific requirements for CO nonattainment

areas, (iv) specific requirements for PM-10 nonattainment areas, and (v) specific requirements for sulfur oxides, NO₂, AND PB NONATTAINMENT AREAS.

Existing Clean Air Act section 171 is amended in section 102(a) of the bill to provide that the definition of “reasonable further progress” means such annual incremental reductions as prescribed by the Clean Air Act or by the Administrator. The definition of “nonattainment area” is revised to mean any area designated as nonattainment by the Administrator under section 107.

Classifications of nonattainment areas.—Section 172(a)(1) is amended in section 102(b) of the Clean Air Act Amendments of 1990 to provide that after promulgating the designation of an area as nonattainment, EPA is authorized to classify nonattainment areas for purposes of imposing different attainment dates and different control requirements. In determining the classifications, EPA may consider the severity of the air quality problem, the feasibility of pollution control measures, and other factors. To announce the classifications, EPA must publish a notice in the Federal Register, which is not subject to notice and comment and is not subject to judicial review. However, EPA's classification may be challenged after the Administrator takes action on a SIP submittal under section 110(k) or imposes sanctions under section 179. The notice should explain the basis for the classifications.

Attainment dates for nonattainment areas.—Revised section 172(a)(2) provides that for primary NAAQS, a nonattainment area must reach attainment as expeditiously as practicable, but no later than five years from the date of designation to nonattainment. EPA may grant an extension of up to 10 years, depending on the severity of the problem and the feasibility of control measures.

For secondary standards, the attainment date is a reasonable time after the date of designation.

The Administrator may grant up to two one-year extensions of the attainment date, upon request by the State, if the State complies with all plan requirements and no more than an minimal number of exceedances of the standard, as determined by EPA, has occurred in the year preceding the extension year.

Schedule for plan submissions.—Revised section 172(b) provides that when EPA promulgates the designation of an area as nonattainment, it must set a schedule for plan submittal. At the latest, all elements of the plan other than the attainment demonstration must be submitted within three years from the promulgation of the nonattainment designation.

Nonattainment plan provisions.—Revised section 172(c) establishes requirements for all nonattainment area plans, including those for ozone, CO, and PM-10 nonattainment areas. These requirements include for the following provisions:

(1) All reasonably available control measures are to be provided for as expeditiously as possible. To comply with this requirement, the SIP must require use of reasonably available control technology (RACT) on existing stationary sources, at a minimum.

(2) Requirements for reasonable further progress.

(3) Emissions inventories, including periodic updates as may be required by EPA.

(4) An identification of expected emissions from new sources and a demonstration that those emissions will be consistent with reasonable further progress towards attainment, and attainment by the date required.

(5) Requirements for new or modified major sources, in accordance with Clear Air Act section 173.

(6) Enforceable emission limits and other measures necessary for attainment (including, at the State's choice, economic incentives such as fees or auctions).

(7) General implementation planning requirements of section 110(a)(2).

(8) Equivalent modeling techniques, emission inventories, and planning procedures may be allowed by the Administrator upon application by the State.

(9) The implementation of specific contingency measures to be undertaken in the event the area fails to meet any applicable milestone, make reasonable further progress, or attain the NAAQS by the deadline date. Such measures are to take effect without further action by the State of Administrator, and are to be adequate to compensate for any emission reduction shortfall.

Plan revision required in response to findings of plan inadequacy.—Revised section 172(d) provides that where the State is required to submit a SIP revision because the Administrator has issued a finding that the SIP is substantially inadequate to provide for attainment or meet any other requirement of the Act, the SIP revision must correct any deficiencies identified by the Administrator and meet all other applicable requirements of the Act. The Administrator is authorized to adjust otherwise applicable dates, except for attainment dates, to the extent necessary to apply those requirements in a consistent fashion. The new section requires EPA, as appropriate, to issue (i.e., make public) written guidelines, interpretations, and information to the States, taking into consideration any such guidelines, interpretations, or information provided to the States or others in the public before enactment. This requirement should help States submit adequate and approvable SIP's and revisions. It should also help those subject to the plan requirements. Internal agency memoranda to EPA personnel that are not available to the public or made public will not suffice.

Future modification of standard.—Revised section 172(e) provides that if a NAAQS is relaxed, control requirements in areas that remain in nonattainment may not be made less stringent.

Permit requirements.—Section 102(c) of the bill amends Clean Air Act sections 172 and 173, concerning permit requirements.

New source requirements.—The current Clean Air Act requirements for new and modified major stationary sources, including permits, are retained, revised, and expanded.

The requirement that new sources or modifications in nonattainment areas obtain offsets for their emissions is retained. The Administrator is given the authority to set the rules for determining the “baseline” against which emission offsets are to be credited. The baseline is to be consistent with assumptions used in the State's attainment demonstration. The section 172 requirement that States analyze possible alternative sites in issuing new source permits is retained.

Major sources must each obtain offsets, except for sources located in zones targeted by the Department of Housing and Urban Development and EPA for economic development, which must come within allowances for emission increases provided for in the area's attainment demonstration.

Prohibition on use of old growth allowances.—New section 173(b) prohibits continued use of growth allowances approved prior to any SIP call.

Offsets.—A new section 173(c) is added which clarifies that a new or modified major stationary source may only comply with offset requirements under Part D by obtaining enforceable emission reductions from the same source or other sources in the same nonattainment area. However, provision is made for a State to allow a source to obtain emission reductions in a second area (or other additional areas) if the second area has an equal or greater classification and emissions from that second area contribute to a violation of NAAQS in the first area. Such enforceable emission reductions are required to be in effect by the time the new or modified source commences operation.

Section 173(c) specifies that any such offsets must be adequate to assure that the total tonnage of increased emissions from the new or modified source are offset by an equal or greater reduction, as applicable, in actual emissions. Reductions in potential

or allowable emissions are not to be deemed adequate if there is not a real reduction in actual emissions that equals or exceeds, as applicable, the emission increase accompanying the operation of the new or modified major source. Emission reductions otherwise required by law are not allowed to be creditable for the purposes of any offset requirement. Incidental emission reductions which are not otherwise required by this Act would not be considered "as required by law" and shall be creditable if they otherwise meet the requirements of the new section 172(c)(1). For example, reductions that are achieved indirectly pursuant to a requirement of the Act are not covered—for example, VOC reductions achieved by virtue of an air toxics requirement (other than the specific pollutant directly covered by such a requirement), or reductions achieved pursuant to a State requirement that goes beyond the requirements of this Act. These types of reductions are creditable.

In the case of ozone nonattainment areas covered under subpart 2 of these amendments, the Committee specifies that the minimal ratio of offsetting emission reductions to actual emission increases shall not be less than 1.1 to 1.0. In addition, greater offset ratios and more inclusive major source definitions in Sections 103, 104, and 105 of this bill may apply to the implementation of the offset program in ozone, CO, and PM-10 nonattainment areas to require greater offset ratios, and regulation of smaller sources, in more polluted areas.

The Committee notes that a company that is building either a new or modified production facility pursuant to a valid construction permit and that incurred no obligation under current law to obtain offsets as a condition of obtaining its construction permit would not be required under the provisions of this amendment to obtain offsets as a condition of being issued its operating permit. The amendment makes no change in current law in this regard. Also, if the company builds its facility consistent with the requirements of the construction permit which was issued prior to enactment of this bill, the company may subsequently obtain an operating permit without meeting any additional obligations related to obtaining offsets, even if the area in which the company is building its facility moves from a classification which did not require offsets to one which does. In effect, the company is grandfathered, just as it would be under current law. The company would not be required to obtain offsets as a condition of obtaining its operating permits even if the operating permit is applied for by the company after enactment of the amendment.

Control technology information.—A new subsection 173(d) is added which requires States to submit to EPA control technology information from permits issued under Section 173. EPA is to make this information available to the States and the general public through a control technology clearinghouse (as provided in section 108(k)) for information regarding reasonably available control technology (RACT), best available control technology (BACT), and lowest achievable emission rate technology (LAER). The affected sources and States and local permitting authorities need access to such information.

Planning procedures.—Section 102(d) of the bill revises section 174 which addresses planning procedures. The planning procedures set out in current sections 174 (a) and (b) are broadened to ensure that State and local (including regional) authorities share in the development and implementation of the SIP, with some technical revisions to make clear that implementation includes enforcement and to conform this section with revisions in other parts of the Act. In addition, a new subsection (c) is added, which clarifies that when a nonattainment area includes more than one State, the affected States may jointly undertake planning procedures.

Maintenance plans.—Section 102(e) of the bill establishes a new Clean Air Act section 175A addressing Maintenance Plans. Under this section, any nonattainment area seeking redesignation to attainment must submit an approvable maintenance plan showing that the standard will be maintained for at least 10 years. The plan must include such additional measures as are necessary to assure such maintenance of the standard. Subsequent plan revisions are required eight years after designations as attainment to provide for maintenance of the standard for the 10-year period following the expiration of the first 10-year period.

The new section specifically provides that until such plan revision containing a maintenance plan meeting the requirements of this section is approved, and the area is redesignated as an attainment area, all existing SIP requirements and Part D requirements continue in force and effect.

The new section requires each maintenance plan SIP revision to include such contingency measures as the Administrator deems necessary to promptly correct any violation of the standard which occurs after redesignation of the area as an attainment area. It also requires each such maintenance plan to provide contingency measures that include implementation by the State of all measures for control of the air pollutant concerned which were contained in the SIP for the area prior to its redesignation as an attainment area. More may be required by EPA. The Committee believes EPA should provide guidance which shall be public for such plans.

This requirement is intended to assure that areas which have attained and are on a maintenance plan have an adequate program of controls immediately available in the event the area once again exceeds the standard.

Interstate transport.—Section 102(f) of the bill establishes a new Clean Air Act section 176A which, upon EPA's own motion or upon petition from a State, provides for an interstate transport region that consists of all States which contribute to NAAQS violations in any one State for a particular pollutant. After establishing such a region, EPA may add or remove States from it, based on the same considerations concerning emissions.

Under section 176A(b), whenever EPA establishes an interstate transport region, it must establish a commission, consisting, as a minimum, of the Governor of each State or the Governor's designee, one air pollution official from each State in the region, the Administrator and a representative from each of the relevant EPA regions. It is intended that no member serve in two capacities. The Federal officials have a nonvoting status. All actions must be by majority vote. The Commission may recommend that EPA issue a SIP call to certain States, requiring them to include specified measures in their SIPs to solve the interstate transport problem. It can make other recommendations as well. All must include the basis for the submittals.

Under section 175(c), the Administrator is obligated to act, after an opportunity for public input, to approve or disapprove in whole or in part each of a Commission's recommendations within 18 months after they are submitted. Conforming changes are made to Clean Air Act section 106 (authorizing EPA to fund interstate air quality agencies) to authorize EPA funding for transport commissions formed under new Clean Air Act section 176A.

Sanctions and consequences of failure to attain.—Section 102(g) establishes a new section 179 specifying mandatory sanctions for State failure to submit or implement an approvable SIP, and establishing the consequences for nonattainment areas that fail to attain by the deadline date.

Section 179(a) outlines the State failures which are sanctionable once the EPA Administrator makes the finding or determination or takes a disapproval action. Other provisions of the Act guide the Administrator on when and whether to make such findings, etc. Of course, such findings, etc., are subject to judicial review as final agency actions.

These failures include failure to submit a plan or plan element meeting the minimum criteria of section 110(k), EPA disapproval of a State plan in whole or in part, failure to make any required submission satisfying the minimum criteria of section 110(k), and failure to implement any requirement of an approved plan.

If the State has not corrected such deficiency within 18 months from the Administrator's finding, determination, or disapproval, one of the two listed sanctions in section 179(b) (which includes a highway funding cut-off, and a 2:1 offset requirement) is to apply immediately upon expiration of such 18-month period. If the deficiency is not corrected within an additional six months, the second sanction from section 179(b) is similarly to apply immediately. Both sanctions are to apply at the expiration of the original 18-month period if the Administrator finds that the State is not making a good faith effort to rectify the deficiency. The sanctions remain in place until the Administrator finds that the deficiency has been corrected, and the State has come into compliance. In addition to any other applicable sanction, the Administrator may, in his discretion, withhold all or part of the State air quality grants provided under Section 105 of the Act.

The sanctions provided under Section 179(b) include (1) the cut-off of Federal highways monies, including any project or grant awarded under title 23 of the United States Code, other than for safety or mass transit; and (2) an increased offset ratio of 2 to 1 for application of the emission offset requirements of section 173 to any new source or modification for which a permit is required under Part D.

This system of mandatory sanctions is intended to provide a clear incentive to States for the development and implementation of approvable State air quality plans. To give States operating in good faith an opportunity to correct their failures, 18 months is provided for States to correct deficiencies before sanctions apply. If a State has not corrected its failure in that time, however, one of the two sanctions in section 179(b), of the Administrator's choosing, applies immediately. To further encourage the State to repair its deficiency, the second sanction will apply in an additional six months, if the State has not yet remedied its failure under section 179(a).

The Committee intends the mandatory sanction to send a strong message that Congress is very serious about the effort to achieve clean air, and will require all States to comply fully with the provisions of the Clean Air Act.

The Committee intends that States not making good faith efforts are to be sanctioned more severely than would otherwise be provided for under section 179. The Committee also intends that the Administrator exercise his discretion in a fair and reasonable manner consistent with the requirements of this Act in making such findings. The objective is clean air, not punishment.

Failure to attain.—The sanctions in section 179 apply to failure to develop and implement a complete approvable plan or to otherwise comply with the requirements of the Clean Air Act. However, it is the Committee's intention that States which submit and properly implement a plan in compliance with the requirements of the Act, but which nevertheless fail to attain, are not to be sanctioned. Instead section 179(d) outlines additional pollution control measures and other consequences attaching to a failure to attain.

New Section 179(c) requires EPA to publish a notice in the Federal Register as expeditiously as practicable, but no later than six months after the attainment date, identifying areas failing to attain by their attainment deadline. The Administrator may subsequently revise or supplement determinations under this subsection based on more complete air quality information or analysis.

Section 179(d) describes the consequences of State failure to attain by the applicable deadline. States are given one year after the notice in subsection 179(c) to submit a revised SIP. The section 179(d) SIP revision is to include such additional measures as the Administrator prescribes, and is to include all measures for reducing emissions that can feasibly be implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality related health and environmental impacts.

Federal implementation plans (FIPs).—Section 102(h) of the bill amends Clean Air Act Section 110(c) to provide that the Administrator has a mandatory duty to promulgate a Federal Implementation Plan (FIP) within two years after the Administrator, in accordance with section 179, either: (A) finds that the State has failed to make a required submission or that such submission does not satisfy the minimum criteria under section 110(k)(1)(A), or (B) disapproves a SIP submission in whole or in part.

This provision retains EPA responsibility in section 110(c) of current law to promulgate, in whole or in part, an air quality plan for the attainment, or maintenance of NAAQS, or for the prevention of significant deterioration of air quality, in the event that a State fails to develop and implement a complete approvable plan.

Historically, the FIP process has been effective. In some instances, it has prompted States to take actions required under the Act. For example, recent proposed FIPs in Phoenix, Chicago, and Southern California succeeded, after court action, in producing State air quality planning efforts in areas which had previously failed to comply with the provisions of the Act. The

FIP process has also been useful in enforcing the prevention of significant deterioration (PSD) program under Part C of the Act. More than 30 States currently have PSD programs established and implemented through the FIP process.

Moreover, the legislation, as noted later, in defining the term “Federal Implementation Plan” should remove many of the uncertainties and concerns often expressed by EPA in applying this process.

Section 103. Additional provisions for ozone nonattainment areas

This section adds a new Subpart 2 to Part D of Title I of the Clean Air Act.

Classification and attainment dates.—Designated ozone nonattainment areas are classified by operation of law as marginal, moderate, serious, severe, or extreme areas based on the design values for the area under the existing ozone NAAQS. For each area, the primary NAAQS attainment date for ozone shall be as expeditiously as practicable, but no later than the specified attainment date for the applicable classification, subject to other provisions for extension.

These dates are outside limits intended to provide a reasonable target for a large class of nonattainment areas. In the case of each individual nonattainment area, the bill continues the responsibility to attain as expeditiously as practicable. The objective is to achieve the standard as early as possible with effective and enforceable measures and without gaming by the States, industry, and others.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Table 4 below provides EPA's most recent data indicating on a preliminary basis how areas will likely be classified under this section.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Several special rules and adjustments apply with respect to these classifications and attainment dates: (i) Within 90 days of enactment, EPA may adjust the classification of any area which would have been classified in another category if the design value were 5 percent greater or 5 percent less. In evaluating whether such adjustment is appropriate the Administrator is to consider the number of exceedances in the area, the level of pollution transport into and out of the area, and the mix of sources and air pollutants in the area. (ii) The Administrator may allow up to two one-year extensions of the attainment date if the State has met all SIP commitments and has not recorded more than one exceedance of the ambient air quality standard in the year preceding the extension year. (iii) Notwithstanding the attainment date generally applicable to severe areas in section 181(a), severe areas with a design value between 0.190 and 0.280 ppm shall be allowed an attainment date 17 years from enactment.

The authority to adjust the classification of areas close to the boundary under section 181(a)(4) is intended to allow the Administrator flexibility to make the classification system as well suited as possible to the particular circumstances of the nonattainment area. Any adjustments under this paragraph are to be made on a case by case basis in response to the particular circumstances of each nonattainment area. Adjustments are limited to areas that would be in a different classification if the ozone design value were 5 percent greater or less. Adjustments may only be made within 90 days of enactment. The limited time period is intended to assure that State and EPA resources are devoted to efforts to attain the standard, and not to changes in the classification of areas.

New designations and reclassifications.—New Clear Air Act Section 181(b) provides that areas subsequently designated nonattainment after the initial designation and classification are to be classified by operation of law in accordance with Table I under section 181(a). These areas are to be given the same timeframes to reach attainment and subject to the same requirements as areas initially designated nonattainment and classified by operation of law under subsection 181(a).

Reclassification upon failure to obtain.—Section 181(b)(2) provides that no later than six months after the attainment date has passed, EPA must publish a notice identifying each area that failed to attain. In the case of marginal, moderate or serious areas,

EPA must reclassify (“bump-up”) each such area to the next higher classification, or (if the design value is higher than the level at which the area was originally classified) the classification which has become applicable to the area's design value. There is no “bump-up” for severe or extreme areas. Areas that are “bumped up” in this respect must begin to meet the requirements of the new classification from the date of reclassification.

Voluntary bump-up.—Section 181(b)(3) provides that the Administrator is to grant the request of a State seeking to reclassify a non-attainment area to a higher classification. An area “bumped up” in this fashion is to be subject to the more stringent control requirements applying for the higher classification, and must meet all deadlines applicable to such higher classification.

The voluntary bump-up is provided for areas that wish to impose the more stringent control measures associated with a higher classification or that, for reasons such as extremely rapid population growth, conclude they will not be able to attain by their otherwise applicable attainment date. Such areas may choose to be considered in a higher classification. Areas choosing to bump up must meet all deadline and control requirements applicable to the higher classification, and are not eligible for any adjustment of deadlines as provided under section 182(i). In light of this limitation, the Committee notes that areas seeking a voluntary bump up would be advised to do so rapidly.

Failure of severe areas to attain.—Section 181(b)(4) specifies the requirements applying to severe areas that fail to attain by the applicable attainment date, as determined by EPA. Such areas are to be subject to the emission fee provisions of section 185, and the percent reduction requirements of section 182(c)(2)(B) and (C) concerning annual emission reductions necessary to achieve reasonable further progress. States are required to demonstrate to the Administrator that the emission reductions required to achieve reasonable further progress under section 182(c)(2)(B) have been achieved for each three year period at successive three year intervals following the attainment date. This requirement closely tracks the milestone system applying to all serious, severe and extreme ozone nonattainment areas. Areas failing to make the required demonstration, as determined by EPA, of emission reductions are considered to be in violation of a requirement for a SIP submission, and are to be subject to mandatory sanctions as provided in section 179.

In addition to the requirements above, the new section provides that severe areas failing to attain which have a design value of greater than 0.140, or which have failed to achieve the aggregate emission reductions required as of the most recent applicable milestone, are also subject to the new source review and RACT requirements applicable to extreme areas, but not other extreme area requirements. Such areas are also required to regulate existing sources with emissions of 10 tons per year or more as “major sources,” which means that such sources must obtain permits and implement RACT. Those severe areas failing to attain which are not covered under either of the two criteria just listed will also be subject to the extreme area new source and existing source review programs three years after the applicable attainment date, unless such areas attain within such 3-year period. The extreme area new source review program required under this section is to include the source size definition of major source in extreme areas (covering sources emitting 10 tons or more per year), and all rules governing new sources and modifications under subsection 182(e).

Section 181(b)(4)(D) provides that if the method of determining compliance with the NAAQS for ozone is modified by the Administrator, the Administrator is to similarly modify the 0.140 design value in section 181(b)(3). In such a case the Administrator is directed to establish a new design value or other indicator comparable to 0.140 in terms of how close that value is to the standard for attainment.

Reference to terms.—Section 181(c)(2) clarifies that the term “next higher classification” or similar terms refers to the classification attaching to the next higher set of design values.

Plan submissions and requirements for ozone nonattainment areas.—Under Section 182 all ozone nonattainment areas are subject to specified planning and control requirements, geared to their classification. Each higher classification must comply with the requirements of the preceding classification, plus additional requirements.

The graduated control program.—The graduated control program for ozone nonattainment areas reflects the basic philosophy adopted in these amendments that areas which have failed to attain the standard should be allotted more time to do so, but should also be required to impose a regime of new control requirements adequate to assure that they attain the new deadlines. Areas with more serious pollution problems are given more time to attain the standards, but required to put in place a more aggressive program of control measures. To make this program work, the State and EPA must act in a timely fashion to do all that is required of each.

Small sources.—In addition to the increasing array of specific control measures required for more polluted areas, areas with more severe pollution problems are required to regulate increasingly smaller stationary facilities as “major sources.” While a major source in marginal and moderate nonattainment areas is to be a source releasing 100 tons per year or more of pollution, as provided under current law, the cut off for serious areas is to be 50 tons. For severe areas, the threshold is 25 tons, and for extreme areas any source releasing 10 tons per year or more is to be considered a major source.

The requirement for regulation of smaller sources is essential for attainment in heavily polluted areas, as OTA has observed. The current 100 ton definition of a major stationary source includes only a limited portion of the stationary source of ozone forming pollution. OTA recently estimated that 100 ton and larger sources constitute only about eight percent of the total VOC emission inventory. These larger sources have, in most cases, already adopted controls, as have mobile sources. They will be required to do more under the bill. However, stationary sources of less than 50 tons are estimated to release about 45 percent of aggregate VOC emissions, and sources less than 25 tons at least 30 percent. Other leading authorities on air pollution control, including the State and Territorial Air Pollution Administrators (the association of State air pollution agencies), have joined OTA in concluding that small pollution sources must be controlled if the effort to attain air quality standards in our more polluted cities is to succeed.

Offset ratios.—Also included in the graduated control requirements are increasing offset ratios that require a greater level of pollution reductions from other sources in the nonattainment area to offset increases in pollution from new sources or modifications. This program is intended to allow economic growth and the development of new pollution sources and modifications to continue in seriously polluted areas, while assuring that emissions are actually reduced. The required level of offset emissions to new emissions from construction or a modification varies from 1.1:1 to 1.5:1 depending on the area.

Netting.—In addition, the graduated control requirements include continued use of “netting” in other than extreme areas subject to increasingly stringent limitations for higher classifications. The netting process allows sources making modifications that would otherwise be subject to the new source review requirements of the Clean Air Act to escape such requirements upon a showing that the emissions increase associated with the modification is “netted out” to a “de minimis” overall level by emission decreases from elsewhere within the source. The netting concept has in many cases allowed sources to modernize and expand without application of new source review provisions intended to assure that modernizations and expansions bring about continued air quality improvement. It is the Committee's view that new source review is not intended to frustrate modernization and it should reconcile economic growth with clean air. It is an important concept for modifications that affect ongoing operations of existing facilities and related existing jobs. Limitations on netting in serious and severe areas include a lowered de minimis level from today's level of 40 tons per transaction, to a 5-year total of no more than 25 tons. In extreme areas, no de minimis level is allowed, and netting is banned for purposes of determining when the requirement in section 173 for LAER is to be applied.

Marginal areas.—Under new Clean Air Act section 182(a), States must make the following submissions, with respect to marginal areas:

- (1) Within two years after enactment, a State must submit a comprehensive inventory.
- (2) The State must submit various SIP revisions, to the extent it has not already done so, to include (i) reasonably available control technology requirements, which EPA has identified in various guidance documents published and made available

to the public (non-binding internal expressions of policy are not covered); (ii) corrections to any motor vehicle emission control inspection and maintenance program, as previously required in the area, to assure that the program complies with EPA regulations; and (iii) requirements that new or modified sources obtain permits nad undergo new source review as required in Section 172 and 173.

(3) At the end of each 3-year period after the initial inventory is due, the State must submit an updated inventory. In addition, within three years after enactment and annually thereafter, the State must require all stationary sources (except under certain circumstances, sources emitting less than 25 tons per year of VOCs or NO₅x) TO SUBMIT EMISSIONS STATEMENT.

(4) General Offset Requirements.—For purposes of satisfying the emission offset requirements of Part D in marginal ozone nonattainment areas, the ratio of total required emission reductions to total increased emission from a new or modified faciity is to be at least 1.1 to 1.

The bill, while requiring these SIP changes for marginal areas, does not require that States submit new demonstrations for attainment for marginal areas.

Additionally, the bill gives EPA 12 months to review, revise, update and republish in the Federal Register improved I/M guidance to the States, taking into account EPA inspections and audits. The revised guidance must be incorporated in the SIPs. The States will have two years to implement this requirement. The guidance is intended to strengthen I/M and make it more effective.

Moderate areas.—New Clean Air Act Section 182(b) provides that States containing these areas must make the submissions required of marginal areas, as well as the following submissions:

(1) Emission reductions.—States must submit SIPs within three years of enactment providing for a 15 percent or greater reduction from baseline emissions of VOCs in the year of enactment, to be achieved within six years after enactment. Section 182(b)(1) provides that baseline emission regulations are actual emissions during the year of enactment. All emissions reductions are creditable toward the 15 percent requirement, except for reductions due to (i) mobile source tailpipe or evaporative emission regulations promulgated before 1990, (ii) regulations concerning gasoline volatility, and (iii) corrections to current SIPs concerning reasonably available control technology and motor vehicle inspection and maintenance.

The emission reductions called for in this subsection, and elsewhere in section 182, are extremely important in that for the first time they provide a concrete translation of how much an area must do to achieve “reasonable further progress” toward attainment of the standards, as required in section 172 and defined in section 171. Areas that fail, as determined by EPA, to achieve reasonable further progress are in violation of the Act.

The plan required under 182(b)(1)(A) must provide for specific annual reductions in emissions of VOCs and NO₅x AS NECESSARY TO ATTAIN THE PRIMARY OZONE STANDARD BY THE ATTAINMENT DEADLINE, AND MUST INCLUDE A DEMONSTRATION OF ATTAINMENT. THE REQUIRED ANNUAL VOC REDUCTIONS MAY NOT TOTAL LESS THAN 15 PERCENT OVER THE SIX YEARS PROVIDED FOR ATTAINMENT AND SHALL TOTAL MORE THAN 15 PERCENT IF A HIGHER PERCENT IS NECESSARY TO REACH ATTAINMENT. REQUIREMENTS OF THIS SUBPARAGRAPH DO NOT APPLY WITH REGARD TO NO₅x IF THE ADMINISTRATOR DETERMINES THAT ADDITIONAL REDUCTIONS OF NO₅x WOULD NOT CONTRIBUTE TO ATTAINMENT. THIS RECOGNIZES THE POTENTIAL PROBLEM THAT NO₅x REDUCTIONS, WHILE OFTEN BENEFICIAL, MAY NOT RESULT IN OZONE REDUCTIONS IN SOME CASES. IN FACT, IN SOME AREAS NO₅x MAY SCAVENGE OZONE AND A DECREASE IN NO₅x MAY INCREASE OZONE IN THE VICINITY OF THE SOURCE AND ADVERSELY AFFECT AN AREA.

Under Section 182(b)(1)(A)(ii) areas may achieve a less than 15 percent emission reduction if stringent tests are met. To qualify the State must show that (1) the area has in place a new source review and modification program meeting the requirements for extreme areas outlined under section 182(e) and the State program defines as a “major source” any source releasing five tons per year or more; (2) reasonably available control technology is required for all existing major sources in the area; and (3) the plan for the area includes all measures that can feasibly be implemented in the area. In addition, the State must demonstrate that the plan for the area includes all measures achieved in practice by sources in the same source category in nonattainment areas of the next higher classification. (Extreme areas are prohibited under section 182(e) from qualifying under clause 182(b)(1)(A)(ii) for a less than 15 percent emission reduction requirement.)

In defining “baseline emissions,” the bill refers to “emissions from anthropogenic sources.” This refers to emissions resulting from human activity.

The definition of “major source” here and elsewhere in the bill uses the term “group of sources located within a contiguous area and under common control.” The Committee understands this to mean a group of sources with a common industrial grouping, i.e., the same two digit SIC code. It is the approach followed today by EPA as a result of the Alabama Power litigation. It avoids the possibility that dissimilar sources, like a power plant and an adjacent coal mine, will be considered as the same “source” because of common ownership. It is not the Committee's intent that natural gas pumping stations or other natural gas facilities connected by a pipeline but not otherwise within a contiguous area and under common control should be grouped together and considered a single source under this definition.

(2) Reasonably available control technology.—The sip revision must provide for the implementation of reasonably available control technology (RACT) on all major stationary sources. However, emissions from any equipment used in the exploration, production, development, storage or processing of oil or natural gas shall not be aggregated with emissions from equipment in other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units are major sources. The plan must further provide for application of all RACT control measures identified by the Administrator in control technique guidance documents (CTGs). The air pollution permits issued under Title IV by the permitting agency to major stationary sources would incorporate the RACT requirements.

Motor vehicle inspection and maintenance.—The SIP revision must provide for a motor vehicle inspection and maintenance program meeting requirements of the guidance issued under section 182(a)(2)(B) for all moderate areas. This differs from the requirement for marginal areas in that marginal areas not already required to have a motor vehicle inspection and maintenance program are not mandated to establish such a program under section 182(a)(2)(B). All moderate areas without exception are required to establish an inspection and maintenance program meeting the EPA specifications.

Stage II.—Within two years after the date of enactment, States must submit a SIP revision requiring owners or operators of gasoline dispensing systems to install and operate a system for gasoline vapor recovery of emissions from the fueling of motor vehicles (known as “Stage II controls”). This requirement must take effect no earlier than six months but without two years of State adoption of the SIP revision, depending on the size of the gasoline dispensing facilities (including retail gasoline stations and fleet fueling facilities) and whether they are newly constructed. EPA is directed to issue guidance, as appropriate, on the effectiveness of the required Stage II controls. EPA is directed to exempt facilities selling less than 10,000 gallons of gasoline per month or less than 50,000 gallons of gasoline per month in the case of an independent small business marketer of gasoline as defined in section 325. Under section 206 of these amendments, the requirement for Stage II in moderate areas must be waived upon promulgation of regulations in accordance with that section.

General offset requirements.—For purposes of satisfying the emission offset requirements of Part D in moderate nonattainment areas, the ratio of total required emission offsets to total increased emissions from a new or modified facility is to be at least 1.15:1.

Serious Areas. Under new Clean Air Act section 182(c), a State with a serious ozone nonattainment area must meet the same requirements imposed with respect to a moderate area, as well as additional requirements.

For any serious area the term “major source” or “major stationary source” is defined to include any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit at least 50 tons per year of VOCs. There are three principal effects of this definitional change: (1) new or modified sources emitting 50 tons or more per year of VOCs will be subject to new source review requirements; (2) existing sources emitting 50 tons or more per year of VOCs will be subject to RACT requirements; and (3) all sources emitting 50 tons or more per year of VOCs, whether new, modified, or existing, will be subject to permit requirements under Title IV.

Additional requirements applying to serious areas include the following:

(1) Enhanced monitoring.—SIPS are to be revised to include provisions for improved ambient monitoring of ozone and ozone precursors pursuant to guidance from the Administrator. Within 18 months of enactment the Administrator is directed to promulgate rules for enhanced monitoring of ozone, NO₅x, AND VOCS.

(2) Attainment demonstration and reasonable further progress demonstrations.—The State must submit, within four years of enactment, an attainment demonstration based on photochemical grid modeling or another analytical method determined by the Administrator to be at least as effective.

Section 182(c)(2)(B) requires that each SIP include a demonstration that it will achieve VOC emission reductions of at least three percent per year averaged over each consecutive 3-year period beginning six years after enactment until the attainment date. An emission reduction of less than three percent per year may be accepted under this subparagraph, if the State demonstrates to the satisfaction of the Administrator that the SIP providing for such lesser amount includes all measures that can feasibly be implemented in the area in light of technological achievability. The term “technological achievability” refers to measures which can be successfully implemented in actual practice, not measures which merely appear feasible in a research setting, for example. To qualify under this test, the State must demonstrate that the SIP for the area includes all measures achieved in practice by sources in the same source category in nonattainment areas of the next higher classification. The term “achieved in practice” is intended to include those measures which have been successfully implemented in nonattainment areas of the next higher category. If such an area is initiating use of an unusual and unproven control measure and the measure is not successfully implemented in practice this measure would not be required under this provision of the bill unless and until it has been proven successful. Any determination to lessen the 3 percent requirement must be reviewed at each 3-year milestone and revised to reflect the availability of any new technologies or other control steps for sources in the same category.

Under either approach, the percentage must be sufficient to achieve attainment by the applicable date. The baseline for the 3 percent per year reductions and the emission reductions creditable toward such reductions are to be the same as those applying for purposes of calculating the 15 percent reduction under section 182(b)(1).

NO₅x CONTROL.—Section 182(c)(2)(C) directs the Administrator to promulgate within one year guidance concerning conditions under which control of NO₅x MAY BE SUBSTITUTED FOR, OR COMBINED WITH, CONTROL OF VOCS IN ORDER TO REACH ATTAINMENT OF OZONE AIR POLLUTION. IN LIEU OF THE ANNUAL VOC REDUCTIONS REQUIRED IN SECTION 182(C)(2)(B), THE SIP REVISION MAY INSTEAD INCLUDE A DEMONSTRATION TO THE SATISFACTION OF THE ADMINISTRATOR THAT THE PLAN PROVIDES FOR A REDUCTION IN NO₅x, WHICH, IN CONJUNCTION WITH A LOWER LEVEL OF REDUCTIONS OF VOCS, WOULD RESULT IN A REDUCTION IN OZONE CONCENTRATION AT LEAST AS GREAT AS THAT WHICH WOULD RESULT FROM THE PERCENT REDUCTION IN VOC EMISSIONS PROVIDED FOR IN SECTION 182(C)(2)(B). THE SAME BASELINE AND RULES GOVERNING CREDITABILITY OF REDUCTIONS APPLY TO 182(C)(2)(C) AS APPLY TO SECTION 182(C)(2)(B). EPA HAS A YEAR TO ISSUE PUBLIC GUIDANCE FOR STATES AND OTHERS PROVIDING CONDITIONS OR EXAMPLES THEREOF UNDER WHICH NO₅x CONTROL MAY BE SUBSTITUTED FOR VOC CONTROL OR

MAY BE COMBINED WITH VOC CONTROL TO MAXIMIZE REDUCTIONS IN OZONE. NO₅x REDUCTIONS MAY NOT BE SUBSTITUTED FOR VOC REDUCTIONS IN A MANNER THAT DELAYS ATTAINMENT OF THE OZONE STANDARD OR THAT RESULTS IN LESSER ANNUAL REDUCTIONS IN OZONE CONCENTRATION THAN PROVIDED FOR IN THE ATTAINMENT DEMONSTRATION.

The Committee notes there is no requirement in this section or in H.R. 3030 that expressly would require the use of any technology beyond low NO₅x BURNERS EXCEPT IN EXTREME AREAS.

(3) Enhanced vehicle inspection and maintenance program.—Within two years of enactment, a State is required to implement an enhanced program of motor vehicle inspection and maintenance, in accordance with EPA guidance. The program must meet a performance standard achievable by a program combining emission testing with inspection to detect tampering with emission control devices or misfueling. This program must apply for each urbanized serious ozone nonattainment area with a population of 200,000 or more. The program must include computerized emission analyzers, as well as enforcement through vehicle registration denial unless the State can show that the enforcement provisions of an existing program are more effective in assuring that noncomplying vehicles are not operated in the area. On-road emission testing is to be a part of the emission testing system, but is to be a complement to testing otherwise required since on-road testing is not intended to replace such testing. On-road emission testing may not be practical in every season or for every vehicle, and is not required. However, it should play some role in the State program. It is the Committee's intention that States should take into consideration that the results of on-road emission testing, when used, have not been shown to be consistent with Federal emission testing procedures.

The program is to include annual emission testing unless the State demonstrates to the satisfaction of the Administrator that a biennial inspection, in combination with other features of the program, will be equally or more effective. The program is to include the inspection and, as necessary, maintenance and repair of emission control diagnostic systems. The program is to be operated on a centralized basis unless the State demonstrates to the satisfaction of the Administrator that a decentralized program will be equally effective. The Administrator must establish criteria under which decentralized systems may be considered equally effective. In accordance with such criteria, decentralized programs with an electronically connected testing system, a licensing system for decentralized inspection stations, or other measures may be considered acceptable if they are determined to be equally effective. The intent of the Committee is that enhanced inspection and maintenance programs as required under this subsection are to either be centralized, or to include other program elements which taken together allow a decentralized system to be as effective as a centralized system in identifying noncomplying motor vehicles, and causing such vehicles to be repaired.

The program may not allow waivers for any vehicles covered by the emission control performance warranty under section 207(b) or for tampering-related repairs. If waivers are otherwise allowed, the program must require a minimum expenditure of \$450 for repairs, to be adjusted periodically for inflation.

In an April 14, 1989 letter to the Committee, EPA said it found that “waiver rates varied considerably” among the state program EPA audited. Typical cost waiver limits found by EPA in I/M programs were \$50 or \$75. EPA said:

Unless there was a carefully administered waiver system, waivers tended to be a weakness in all programs that allow them.

To some extent, excessive waivers varied with program design. In programs where the administering agency processes all waiver applications (many centralized programs, a few decentralized), the reason for high waiver rates tended to be lenient requirements. Vehicles receiving improper or poorly-performed repairs were granted waivers as long as the repair cost limit was reached. It is not unusual for retest scores on failed vehicles to remain the same or increase as a result of such repairs. Repair cost limits were often inadequate to ensure that vehicles received the basic repairs needed to bring the vehicle into compliance. In addition, vehicles eligible for warranty coverage could get waivers without ever having sought a free warranty repair and owners of failing vehicles were allowed to do their own repairs and get a waiver if the repairs were inadequate. Repairs done by vehicle owners were often ineffective and, in one program which had data available, about one-third of the

waivers were from this group, a disproportionately large percentage. Finally, not all commercial repairs were appropriate for the cause of the I/M failure.

The total I/M program is important because older vehicles are responsible for a disproportionate share of ozone-forming pollution from motor vehicles.

Poorly maintained vehicles that pollute, no matter how old, should be required, at a minimum, to meet the standards applicable to them when they were manufactured. If repairs are needed, they should be made.

(4) Clean-fuel vehicle program.—The State must submit a SIP revision, for each area covered by the clean-fuel vehicle program prescribed under section 212(d), which includes all measures necessary to make use of clean alternative fuels in clean fuel vehicles economic from the vehicle owners' standpoint. Each area which seeks voluntary inclusion in the Federal clean fuel vehicle program must also submit a SIP revision. If a State fails to meet this requirement, it may not receive credit in any attainment demonstration or reasonable further progress demonstration for emissions reductions from implementation of the Federal clean-fuel vehicle requirements under section 212.

(5) Transportation controls.—Beginning six years after enactment and each three years thereafter the State is to submit a demonstration as to whether aggregate vehicle miles traveled, aggregate vehicle emissions, congestion levels, and other relevant parameters are consistent with assumptions used in the area's demonstration of attainment. Where such parameters exceed the levels used in the area's attainment demonstration the State has 18 months to develop a revision to its implementation plan containing a program of transportation control measures adequate to reduce emissions to conform with the vehicle emission levels projected in the attainment demonstration. This revision is to be developed in accordance with transportation guidance issued by the Administrator under section 108(f), and is to include implementation and funding schedules adequate to achieve expeditious emission reductions. Alternatively, under section 182(c)(5) the State may offset additional pollution from unprojected increases in vehicle miles traveled or congestion, with achievement of comparable emission reductions from implementation of controls not otherwise required under this Act on other source categories. There must also be measures to reduce congestion.

(6) De Minimis rule.—In applying the new source review provisions of Part D to serious areas any physical change in, or change in the method of operation, a stationary source is not to be considered de minimis unless the increase in net emissions from the source, when aggregated with all other increases in net emissions over any period of five consecutive years, including the calendar year in which such increase occurred, does not exceed 25 tons.

(7) and (8) Special rule for modifications of sources.—Sections 182(c) (7) and (8) establish special rules for modification of major sources. Section 182(c)(8) differs from section 182(c)(7) in that it is applicable to sources releasing 100 tons per year or more, while section 182(c)(7) is applicable to sources releasing less than 100 tons per year. The triggers for these provisions are (1) that a physical change or change in the method of operation has occurred, as defined in section 111(a)(4); and (2) that the de minimis threshold has been exceeded. Once these triggers occur, then the unit involved must (if the source is less than 100 tons per year) meet BACT-level technology. If the source obtains internal offsets at a ratio of at least 1.3:1, then there will not have been a modification under section 173. For units at sources greater than 100 tons per year, once the triggers have occurred, LAER and offsets are required for the unit, unless the source obtains internal offsets at a ratio of at least 1.3:1. The permitting provisions in the two paragraphs are also different.

Section 182(c) (7) and (8) provide that in the case of sources where a unit has undergone a change producing a greater than de minimis emission increase, and such 1.3 to 1.0 internal offsets have not been secured, such change is to be considered a modification subject to all of the new source review requirements of Part D. However, section 182(c)(7) provides that in applying section 173(a)(2) the required technology for sources emitting less than 100 tons per year shall be the best available control technology, as defined in Clean Air Act section 169, rather than the lowest achievable emission rate, as currently provided in section 173(a)(2).

(9) Contingency measures.—The SIP revision must provide for the implementation of specific measures to take effect upon the failure of the area to achieve any applicable interim schedule (including any milestone), or to attain the standard by the applicable attainment date. Such contingency measures must be adequate to assure that the emission reduction shortfall is compensated for, and must take effect without further action by the State or the Administrator upon the failure of the area to meet the interim requirement or attainment deadline.

(10) General offset requirement.—For purposes of satisfying the emission offset requirements of Part D in marginal ozone nonattainment areas, the ratio of total required emission reductions to total increased emission from a new or modified facility is to be at least 1.2 to 1.

Severe area requirements.—Section 182(d) provides that all requirements for SIP revisions applicable to serious areas are also to be applicable to severe areas. Additional requirements are provided for in this subsection, as described below. For any severe area the terms “major source” and “major stationary source” apply to all sources included in the section 302 definition of “major stationary source”, as well as any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit 25 tons or more of VOCs. These definitional changes and interpretations have the same principal effects as described for serious areas. As already noted, it is not the Committee's intent that natural gas pumping stations or other natural gas facilities connected by a pipeline but not otherwise within a contiguous area and under common control should be grouped together and considered a single source under this provision.

Additional SIP revisions required for severe areas include the following:

(1) Vehicle miles traveled.—Within two years of enactment, the State is required to submit a SIP revision including all reasonably available techniques for reducing aggregate vehicle emissions. At a minimum the revision must include specific enforceable strategies and transportation control measures adequate to offset any growth in emissions from increases in vehicle miles traveled (VMT). The baseline for determining whether there has been growth in emissions due to increased VMT is the level of vehicle emissions that would occur if VMT held constant in the area. The State must consider the measures specified in section 108(f), as amended by this bill, and include in the SIP, for any such measures not included in the plan, an explanation of why such measure was not adopted, specifying the emission reduction measure adopted in its place to achieve a comparable reduction in emissions, or providing reasons why such reduction is not necessary to attain the health-based standard for ozone air pollution

Where a transportation control strategy listed in section 108(f) is not utilized the State must explain in its implementation plan why it was not, and must provide an alternative means of achieving the emission reductions that would have been attained, unless it can show that such reductions are not needed for attainment. It should be noted that amended section 108(f) requires that the State should ensure adequate access to downtown and other commercial and residential areas and should avoid measures that increase or relocate emissions and congestion rather than reduce them. This provision responds to the extreme importance of transportation planning to attain and maintain ambient air quality standards in the nation's most severely polluted cities.

(2) Offset requirements.—For purposes of satisfying the emission offset requirement of Part D in severe ozone nonattainment areas the ratio of total required emission reductions to total increased emissions from a new or modified facility is required to be at least 1.3 to 1. However, if the State air quality plan requires that all existing major sources in the nonattainment area use the best available control technology, as defined in section 169, for the control of VOCs, the required offset ratio shall be 1.2 to 1.

The lower offset ratio for areas requiring best available control technology, instead of reasonably available control technology, for all existing sources is intended to provide an incentive for the use of more effective pollution control technology on existing sources, and is further intended as a recognition that once all existing sources are tightly controlled and additional emission reductions needed for offsets will be more difficult to secure.

Extreme area requirements.—Section 182(e) provides that all requirements for SIP revisions applicable to severe areas are also to be applicable to extreme areas, as well as additional requirements provided for in this subsection. For any extreme area the terms “major source” and “major stationary source” apply to all sources included in the section 302 definition of major stationary source, as well as any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit 10 tons or more of VOCs. These definitional and interpretation changes have the principal effects described for serious areas. As already noted, it is not the Committee's intent that natural gas pumping stations or other natural gas facilities connected by a pipeline but not otherwise located within a contiguous area and under common control should be grouped together and considered a single source under this provision.

Section 182(e) explicitly provides that the provisions of clause (ii) of section 182(b)(1)(A), which allows qualifying areas to achieve less than the required 15 percent emission reduction in the first six years following enactment, and the provisions of clause (ii) of section 182(c)(2)(B), which allows qualifying areas to achieve less than the required annual 3 percent reduction requirement, do not apply in the case of an extreme area.

Additional SIP revisions required for severe areas include the following:

(1) Offset requirements.—For purposes of satisfying the emission offset requirements of Part D in extreme ozone nonattainment areas the ratio of total required emission reductions to total increased emissions from a new or modified facility is required to be at least 1.5 to 1.0. However, if the State air quality plan requires that all existing major sources in the nonattainment area use the best available control technology, as defined in section 169, for the control of VOCs, the required offset ratio shall be 1.2 to 1.

The lower offset ratio for areas requiring best available control technology, instead of reasonably available control technology, for all existing sources is intended to provide an incentive for the use of more effective pollution control technology on existing sources, and is further intended as a recognition that once all existing sources are tightly controlled, the additional emission reduction needed for offsets will be more difficult to secure.

(2) Modifications.—Any change at a major stationary source which results in any increase in emissions from any discrete operation, unit or other pollutant emitting activity is to be considered a modification under section 172 and section 173(a)(2), which requires installation of technology to achieve the lowest achievable emissions rate. In effect this section provides that for purposes of the required application of LAER technology under section 173(a)(2), there is no de minimis level of emission increase in evaluating whether a change at a unit has produced an emission increase, and no netting of emissions in evaluating whether a change at a unit which produces an emission increase is to be considered a modification subject to LAER.

Under Section 182(e)(2) a change is evaluated differently with regard to whether external offsets are to be required under section 173(a)(1), than with regard to whether LAER technology under section 173(a)(2) is to be required. Section 182(e)(2) provides that a change at a major stationary source which results in any increase in emissions from any discrete operation unit or other pollutant emitting activity shall not be considered a modification for purpose of section 173(a)(1), which would require a 1.5 to 1 offset for an extreme area, if the owner or operator offsets the increase by a greater reduction in emissions from other discrete operations, units or activities within the source to achieve an internal offset ratio of 1.3 to 1. Because the change is a modification subject to permit requirements under section 172(c)(5), the source must secure permits providing for the internal 1.3 to 1.0 offsets, before such internal offsets can be credited.

The Committee intends these limitations on netting to eliminate the opportunity for major sources to escape application of new source review requirements applying to any modification. Extreme areas have by far the worst air quality in the nation, and cannot afford to miss any opportunity for greater emission reductions.

The offset requirements applicable to modifications do not apply in the case of an existing source where such modification consists of the installation of equipment required to comply with the applicable implementation plan, permit or this Act. This

provision is intended to prevent sources which might be considered to have undergone a modification solely because of the installation of required pollution control equipment from being subjected to the offset requirements of section 173(a)(1).

(3) Use of clean fuels or advanced control technology.—Within three years after enactment the SIP must be revised to require that effective eight years after enactment, each new, modified, or existing electric utility, industrial, or commercial boiler emitting more than 25 tons per year of NO_{5x} MUST EITHER (A) BURN NATURAL GAS, ETHANOL, METHANOL, OR A COMPARABLY LOW EMITTING FUEL AS ITS PRIMARY FUEL (THE FUEL BURNED 90 PERCENT OR MORE OF THE OPERATING TIME) OR (B) USE ADVANCED CONTROL TECHNOLOGY SUCH AS CATALYTIC CONTROL TECHNOLOGY OR COMPARABLY AVAILABLE METHODS FOR THE REDUCTION OF EMISSIONS OF NO_{5x}. THIS PARAGRAPH DOES NOT APPLY DURING A NATURAL GAS EMERGENCY AS DEFINED IN TITLE III OF THE NATURAL GAS POLICY ACT OF 1978.

(4) Traffic control measures.—The SIP for an extreme area may include provisions establishing traffic control measures applicable during heavy traffic hours to reduce the use of heavily polluting vehicles or heavy-duty vehicles, notwithstanding any other provision of law.

(5) New technologies.—Conditions are established governing circumstances in which the Administrator may approve, in accordance with section 110, provisions of a SIP which anticipate the development or improvement of control technologies, and may approve an attainment demonstration based on such provisions. The State must demonstrate to the satisfaction of the Administrator that such new technologies are not necessary to achieve the incremental emission reductions required during the first ten years after enactment, and that the State has submitted to EPA enforceable commitments to develop and adopt contingency measures that will be implemented to achieve the required emission reductions if the anticipated technologies do not achieve the planned reductions. The measures must be submitted to EPA for approval under section 110 not later than three years before implementation.

Control of NO_{5x}.—New Clean Air Act section 182(f) provides that the plan provisions required under new subpart 2 of Part D for major stationary sources of VOCs shall also apply to major stationary sources of NO_{5x}. THE TERM “MAJOR STATIONARY SOURCE” IS TO INCLUDE SOURCES COVERED BY THE DEFINITION OF THIS TERM IN SECTION 302, AS WELL AS THE DEFINITIONS FOR CLASSIFICATIONS OF OZONE NONATTAINMENT AREAS IN SUBSECTIONS 182 (C), (D) AND (E).

This subsection is not to apply to those sources of NO_{5x} WHERE THE ADMINISTRATOR DETERMINES THAT THE NET AIR QUALITY BENEFITS ARE GREATER IN THE ABSENCE OF REDUCTIONS OF NO_{5x} FROM THE SOURCES. THIS SUBSECTION ALSO DOES NOT APPLY: (1) TO NONATTAINMENT AREAS NOT WITHIN AN OZONE TRANSPORT REGION IF THE ADMINISTRATOR DETERMINES THAT ADDITIONAL REDUCTIONS OF NO_{5x} WOULD NOT CONTRIBUTE TO ATTAINMENT IN THE AREA; AND (2) TO NONATTAINMENT AREAS WITHIN AN OZONE TRANSPORT REGION IF THE ADMINISTRATOR DETERMINES THAT ADDITIONAL REDUCTIONS OF NO_{5x} WOULD NOT PRODUCE NET OZONE AIR QUALITY BENEFITS IN THE OZONE TRANSPORT REGION. THE COMMITTEE EXPECTS EPA TO PROVIDE GUIDANCE TO THE STATES, SHORTLY AFTER ENACTMENT, TO ASSIST IN THE PREPARATION OF REVISED SIPS WITH REGARD TO THE FACTORS TO CONSIDER IN DETERMINING WHETHER OR NOT TO CONTROL NO_{5x} EMISSIONS.

Emission reduction milestones.—Section 182(g) establishes a new system of three year emission reduction milestones for serious, severe, and extreme ozone nonattainment areas. This system is intended to assure that such areas remain on track toward attainment of the standard by the applicable deadline, and that those areas falling behind their emission reduction timetable learn of their shortfall as quickly as possible, and have an early opportunity to take corrective action.

The milestone system is intended to avoid one of the problems inherent in existing law where some urban areas were not informed by EPA until the fall of 1986 that they could be subject to sanctions because they were unlikely to achieve air quality

standards before 1987. Under the milestone program provided for in this subsection, areas will be required to track their progress, and to take timely corrective action to compensate for any emission reduction shortfall. It is expected that this program will facilitate the attainment of standards by the applicable deadline.

Paragraph 182(g)(1) requires that six years after enactment, and at three-year intervals therefore, States must determine whether each serious, severe and extreme nonattainment area has achieved the aggregate reduction in emissions required for the area for enactment to the date of the milestone.

Paragraph 182 (g)(2) requires States to submit to the Administrator, not later than 90 days after the date on which the applicable milestone occurs, a demonstration that the aggregate required emission reductions have been achieved. The demonstration is to be in such form and manner, and contain such information and analysis as the Administrator requires by rule. The Administrator is to determine the adequacy of a demonstration under this subsection within 90 days of receipt of a demonstration containing the required information and analysis.

Under paragraph 182(g)(3), if any serious or severe ozone nonattainment area fails to submit the demonstration required under this subsection within the required period, or if the Administrator determines that such area has not met the applicable milestone, the State is to elect within 90 days (i) to have the area reclassified to the next higher classification, (ii) to implement specific additional measures, as provided in the contingency plan, adequate to meet the next milestone, or (iii) to adopt an economic incentive program, consistent with EPA guidance, sufficient in combination with other elements of the State plan to achieve the next milestone, including compensation for the existing emission reduction shortfall. If the State elects to implement the specific additional measures provided for in the contingency plan under section 182(g)(3)(B), the Administrator is to review the contingency plan and evaluate whether it is adequate to achieve the aggregate emission reductions needed to meet the next milestone, including compensation for the existing emission reduction shortfall. If the Administrator finds that such contingency measures are not sufficient to achieve the required emission reductions, he is to require further measures as necessary to achieve such emission reductions. If the State fails to make the required election within such 90-day period, or within six months thereafter, the area is to be reclassified to the next higher classification by operation of law. The Committee expects that the States will make a timely election to that such a mandatory "bump up" should not occur because of the election provision. The objective is to make it relatively easy to elect. Once that occurs there can be no "bump up" under this subsection.

Under section 182(g)(4), within two years of enactment the Administrator is to publish rules for the economic incentive program which the State may utilize under section 182(g)(3)(C). The program must be sufficient, in combination with other elements of the State plan, to achieve the aggregate emission reductions required to meet the next milestone. The program may include a system of State established emission fees, marketable permits, fees on the sale, import or manufacture of products the use of which contribute to ozone formation, or other similar measures, and may also include incentive and requirements to reduce vehicle miles traveled, including transportation control measures. Such rules are to include model plan provisions which may be adopted for reducing emissions from permitted stationary sources, area sources, and mobile sources. (The reference to mobile sources is not intended as a directive or authority to impose any requirement effecting the application of Title II of the Act to motor vehicles.) Such rules shall specify that any revenues generated by the State plan provisions adopted under this clause are to be used by the State solely for: creating incentives for emission reductions, providing assistance for the development of innovative technologies and the development of lower polluting solvents and coatings, or funding the administrative costs of the State program under the Act. These are not Federal revenues.

The Committee intends this section to promote innovative emission reduction steps by States to help achieve emission reductions needed to remain on track toward attainment of the ozone standard by the applicable attainment date. States are allowed, at their option, to use economic incentives to achieve the needed emission reductions. However, each State with an area failing to meet its milestone must undertake a program of economic incentives or other means capable of achieving the aggregate emission reductions necessary to constitute reasonable further progress and remain on track toward attainment by the applicable deadline.

Under section 182(g)(5) if any extreme ozone nonattainment area fails to submit the demonstration required under this subsection within the required period, or if the Administrator determines that such area has not met the applicable milestone, the State must within nine months submit a plan revision to implement an economic incentive program meeting the requirements of paragraph (4). The Administrator has nine months to review and approve or disapprove such revision. The failure to submit an approvable SIP revision as required under section 182(g), shall be sanctionable to the same extent as the failure to submit any other SIP revision required under Part D.

Rural transport areas.—Section 182(h) provides that if the Administrator determines that any nonattainment area outside, and not adjacent to, a metropolitan statistical area or consolidated metropolitan statistical area (as defined by the United States Bureau of the Census) does not significantly contribute to ozone nonattainment in that area or another area, the area may be subject to only the requirements applicable to marginal areas, regardless of the air quality.

Reclassified areas.—Section 182(i) provides that areas that are reclassified because they fail to attain must meet the requirements and deadlines applicable to the new classification except that the Administrator may adjust any applicable deadlines, except for attainment dates, to the extent necessary to assure consistency among the required submissions. Areas voluntarily bumping-up under section 181(b)(2)(C) are not to receive any deadline adjustment.

Multistate ozone nonattainment areas.—Section 182(j) provides that States containing a portion of a single ozone nonattainment area which covers more than one State are to take all reasonable steps to coordinate air quality planning with other States sharing the multistate nonattainment area, and are to use photochemical grid modeling or such other modeling techniques as are required by the Administrator for such multistate area for the demonstration of attainment.

If a State in which there is located a portion of a multistate nonattainment area fails to make the required demonstration of attainment for such area, the State may, in the period required for such demonstration, petition the Administrator to make a finding that the petitioning State would have been able to make such demonstration, but for the failure of one or more other States in which other portions of the nonattainment area are located to commit to implementation of all measures required under section 182. If the Administrator makes such finding, the provisions of section 179, relating to sanctions, do not apply by reason of the failure to make such demonstration. Nothing in this subsection limits the applicability of section 179 with regard to the failure of such petitioning State to comply with any other requirement of Part D, except for the required demonstration of attainment. Nor does anything in this subsection limit the applicability of section 110(c) (regarding Federal implementation plans).

Federal ozone control measures.—Section 183 establishes national requirements and guidelines to assist in the achievement of ozone emission reductions from sources which can be more effectively controlled at a national level, or with Federal guidance.

Control technique guidance.—Section 183(a) provides that within three years of enactment the Administrator is directed to issue additional control technique guideline documents (CTGs), in accordance with section 108(c), for 11 categories of stationary sources of VOC emissions for which such guideline documents have not been issued as of the date of enactment of the Clean Air Act Amendments of 1990. The guidance documents for aerospace coatings and shipbuilding and ship repair mandated under this section are not to be counted within the 11 CTGs required under this subsection. The Administrator is authorized to publish such additional CTGs, beyond those required under this section, as he deems necessary.

Section 183(b)(1) provides that within three years of enactment and periodically thereafter the Administrator is to review and, if necessary, update CTGs issued before enactment of this paragraph.

Section 183(b)(2) calls for the Administrator, in issuing guidelines under this section, to give priority to those categories which he determines make the most significant contribution to the formation of ozone air pollution in ozone nonattainment areas. In particular, the Administrator is directed to give priority to the promulgation of CTGs for hazardous waste treatment, storage and disposal facilities permitted under subtitle C of the Solid Waste Disposal Act. The Administrator is to revise and update CTGs as he determines necessary.

Section 183(b)(3) directs the Administrator within three years to issue control technique guidelines to reduce VOC emissions from aerospace coatings and solvents. Such guidance shall at a minimum be adequate to reduce emissions to such level as the Administrator determines is achievable through adoption of the best available control measures.

Testimony before the Committee indicated that the 1978 CTG for miscellaneous metal parts and products (MMP&P) did not adequately address aerospace coating and solvent applications and should not apply to that source category. This section does not foreclose the Administrator from using data developed by the States specifically addressing aerospace applications, including information prepared by the South Coast Air Quality Management District, and the Administrator is authorized and encouraged to craft the CTG for this category based on such information, provided that it specifically addresses aerospace coating and solvent applications and that the Administrator affirmatively seeks and takes into account the comments of the Department of Defense, the Federal Aviation Administration, the National Air and Space Administration and, as with any CTG, the affected industry.

In identifying best available controls for the industry, this, like other CTGs, shall evaluate technological and economic feasibility of emission reduction strategies for specific aerospace applications. The Committee expects the Administrator to harmonize the VOC reduction objectives of Part D of the Act with the applicable requirements of section 112 and the need to protect stratospheric ozone.

Section 183(b)(4) directs the Administrator within three years to issue a CTG to reduce VOC and PM-10 emissions from paints, coatings, and solvents used in shipbuilding operations and ship repair. Such guidance shall at a minimum be adequate to reduce emissions to such level as the Administrator determines is achievable through adoption of the best available control measures.

The Administrator is directed in subsection 183(c) to issue within three years other technical documents which identify alternative controls for all categories of stationary sources of VOCs and NO_x which emit, or have the potential to emit, 25 tons per year or more of such pollutant. The Administrator is to revise and update such documents as he determines necessary.

The Committee notes that as a result of an investigation by the Committee, EPA began last October to once again develop CTGs. Prior to this, EPA issued CTGs for 29 categories of existing stationary sources, but halted the practice several years ago. An April 9, 1990 letter to the Committee, gave the status of the following 15 Federal measures, some of which are CTGs:

1. Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation operations.—Guidelines are currently scheduled to be proposed in March 1991 with final guidelines to be issued in December 1991.
2. SOCMI reactor processes.—Guidelines are currently scheduled to be proposed in March 1991 with final guidelines to be issued in December 1991.
3. SOCMI batch processes.—Available data on types and durations of different batch processes and their associated emissions are being reviewed. Research has also begun on identifying existing control technologies and their emission reduction effectiveness and cost. A preliminary draft background document is scheduled for April 1991.
4. Wood furniture manufacturing.—Work is ongoing to collect available information on different types of wood furniture coatings and methods of application. A survey of available data from literature and from State and local agencies is under way. A summary of this material was completed in March 1990. In addition, a survey of nine selected companies for information on coatings, application methods, and equipment and the cost of different technologies started in February and is scheduled to be completed in April 1990. Draft guidelines are to be proposed in May 1992. Final guidelines are scheduled to be issued in July 1993.

5. Plastic parts (business machines) coatings.—Draft guidelines are scheduled to be proposed in June 1992 with final guidelines to be issued in June 1993.

6. Plastic parts coatings (other).—Draft guidelines are scheduled to be proposed in June 1992 with final guidelines to be issued in June 1993.

7. Web offset lithography.—Initial activities have focused on gathering available data on types of inks; processes and equipment; emission estimates; current control technologies; existing State and local regulations; and costs associated with different control alternatives. A summary of these data is scheduled to be completed in June 1990. Decisions on the scope and schedule for this project will be made when this work is completed.

8. Clean-up solvents.—Preliminary technical study is to be completed in September 1990. Decisions on the scope and schedule for this project will be made when the study has been completed.

9. Pesticides application.—Initial data gathering has begun on solvent-based pesticides and emission reduction techniques, including use restrictions, application requirements, use of substitutes, and product reformulation. Because only limited data are expected to be available, data gaps are to be identified when this activity is completed and specific next steps will then be identified. The current schedule calls for an Available Control Technology (ACT) document to be proposed in October 1992.

10. Petroleum and industrial wastewater.—Because of the similarity in types of equipment and control alternatives, this product has been expended to include industrial wastewater facilities in addition to petroleum wastewater facilities. A draft CTG for petroleum wastewater facilities is scheduled to be proposed in February 1991 with a final CTG to be issued in April 1992. The gathering of data on the control of emissions from industrial wastewater facilities is ongoing. Because toxic air emissions from wastewater facilities in certain industries will be addressed under Section 112, the exact scope of any CTG for other source categories will be determined later.

11. Consumer/commercial products.—A two day symposium was held in November 1989 and included various representatives from segments of consumer products industry, State and local air pollution agencies, environmental groups, and EPA. Major issues discussed included the causal relationship between VOC reductions and ozone formation, the definition of VOC, the lack of a reliable inventory for VOC emissions from the use of consumer products, and the need by industry for some standardization of any regulations set at the Federal, State, and local level so manufacturers would not have to comply with a myriad of different requirements. A draft technical study is scheduled to be released for external review in April 1992. A final study incorporating comments received on the draft study will be issued in October 1992. A national rule for selected classes or categories of consumer and commercial products will then be developed, as appropriate, based on the findings of the study.

12. Architectural/industrial coating.—Initial work on this project has focused on collecting available technical data on coatings and lower-VOC substitutes, the amount of solvent contained in each type, control techniques, and regulatory efforts by State and local air pollution agencies. The next step will be to identify data gaps and to develop a list of necessary tasks and a schedule for addressing these gaps. At least parts of this category are a subset of the consumer/commercial products category, will be addressed in the consumer/commercial products study, and will be covered by a national rule rather than guidelines. To the extent this category is covered by guidelines, draft guidelines are to be proposed in July 1992. Final guidelines are scheduled to be issued in September 1993. To the extent this category is covered by national rules, the development of the rules will require a longer time.

13. Adhesives.—At least parts of this category are a subset of the consumer/commercial products category, will be addressed in the consumer/commercial products study, and will be covered by a national rule. To the extent this category is covered by guidelines, the draft guidelines are to be proposed in June 1992 with final guidelines to be issued in August 1993. To the extent this category is covered by national rules, the development of the rules will require a longer time.

14. Autobody refinishing.—At least parts of this category are a subset of the consumer/commercial products category, will be addressed in the consumer/commercial products study, and will be covered by a national rule. To the extent this category is covered by guidelines, the draft guidelines are scheduled to be proposed in March 1992 with final guidelines to be issued in June 1993. To the extent this category is covered by national rules, the development of the rules will take a longer time.

15. Marine vessel loading and unloading.—Gathering of available information on control technologies was initiated in February 1990. Standards are to be proposed in September 1991. Final standards are scheduled to be promulgated in November 1992.

The Committee commends EPA for taking these actions. However, EPA must also ensure compliance with this section.

The Committee expects EPA to involve actively the States, the affected industries, public interest groups and others in the development of these important documents so that they are technically sound and properly applicable to the affected categories or subcategories of sources and reflect all important relevant factors. Such input is important because of the so-called “presumptive nature” of CTGs which, EPA said in a February 3, 1989 letter to the Committee, “limit the State's prerogative to decide on the sources to control and levels of control to require.” While noting that “there may be situations where application of CTG controls may not be appropriate to an individual source or process,” EPA also said:

The Agency's policy on reasonably available control technology (RACT) provides for such exceptions (44 FR 53761, 9/17/79). The policy states that the CTG is a presumptive norm, but that a State can develop a case-by-case RACT independent of the CTG as long as all requirements of the Clean Air Act are satisfied. Therefore, in cases where neither abatement technology nor complying solvents are technically or economically reasonable, a source-specific RACT rule can be adopted. Any divergence from the CTG would have to be justified based on the economic and technical circumstances of the particular sources being regulated.

The bill does not change EPA's policy and procedures regarding the establishment of CTGs.

Guidance for evaluating cost-effectiveness.—Section 183(d) requires the Administrator to develop guidance to the States on analyzing cost-effectiveness of different options for emissions controls. The Committee wants to emphasize its strong view that control of emissions should be achieved in as cost-effective manner as possible.

Control of emissions from commercial and consumer products

General applicable regulations.—Section 183(e) provides that the Administrator is required to submit, within three years of enactment, a study to Congress concerning emissions of VOCs from consumer and commercial products. At the time of submission of this study, the Administrator is required to propose regulations reducing emissions from any consumer and commercial products which emit VOCs into the ambient air that may reasonably be anticipated to contribute to ozone levels that violate the NAAQS. Such regulations are to take into account technical feasibility, costs, lead time, and competition, and may include the control or prohibition of any activity in commerce. Consumer and commercial products are defined extremely broadly. They include any article or product the use, consumption, storage, disposal, or destruction of which causes release of VOCs.

The Administrator may apply the regulations under this subsection only at the level of the manufacturer, processor, wholesale distributor, or importer, and may exempt health use products for which there are no suitable substitutes. Such regulations are to be finalized after the study within one year of proposal. EPA is given broad discretion in fashioning appropriate regulations, including the use of economic incentives (such as fees or auctions). If the State develops adequate procedures under State law for implementing and enforcing these regulations, EPA may approve such procedures.

Regulations requiring BACT.—Section 183(e) provides that at the time the Administrator completes the study under section 182(e)(2), the Administrator is also to promulgate a list of all categories of consumer and commercial products which release significant evaporative emissions of VOCs. The Administrator is to divide the list into four groups based on the relative priorities, for control of the categories. In establishing priorities the Administrator is to utilize factors listed in section 183(e)(2)(B).

Every two years after the list is promulgated, the Administrator is to promulgate regulations covering one of the listed groups of categories, until all four groups and all categories are regulated. Regulations are to be issued for the highest priority group first, and for other groups in decreasing order of their priority. The regulations are to require the best available controls for all listed categories of consumer and commercial products.

Section 183(e)(1) provides that the term “best available controls” means the degree of technologically and economically feasible emission reductions achievable through application of the most effective equipment, measures, processes, methods, systems or techniques, including chemical reformulation, product or feedstock substitution, repackaging, or directions for use, consumption, storage, or disposal.

The regulations requiring use of best available controls are intended to provide a second round of more stringent control requirements for the categories of consumer and commercial products that contribute most significantly to ozone pollution. The regulations under section 183(e)(3) have a broad scope: they apply to any VOCs from consumer and commercial products which in the Administrator's judgment emit VOCs into the ambient air that may reasonably be anticipated to contribute to ozone levels that violate the NAAQS. At the same time, the Administrator has substantial discretion in setting the appropriate level of emissions control under these regulations. By contrast, the standards under section 183(e)(4) apply to a slightly narrower set of categories—those with significant emissions—but must impose a stringent best available control standard.

In determining which categories of consumer and commercial products have significant emissions, and their priority, the Administrator should base his action on the study which is to establish criteria for selecting products or classes of categories thereof which should be controlled using the statutory factors. This should help him identify the relative contribution and importance of each proposed category to the total inventory of VOC emissions from consumer and commercial products. He should list a sufficient number of categories to insure that the inventory of VOC emissions from consumer and commercial products is almost wholly subject to regulation under the best available control standard.

Systems of regulations.—The system of regulation under section 183(e) is intended to be quite broad because the method may have to be different depending on the products or even the regulated entities. To the extent fees, charges, or other funding mechanisms are used, the monies collected must go to a special fund solely to carry out the activities for which such fees, charges, or collections are established or made. There are no general revenues contemplated or authorized for the U.S. or EPA. The use of the monies is subject to appropriation Acts.

States proposing regulations other than those adopted under this subsection are to consult with the Administrator regarding the actions of other States. The Administrator is to establish a clearing house of information, studies, and proposed and final State regulations concerning consumer and commercial products, and provide information from such clearinghouse to State and local governments upon request.

The State consultation process is intended to give State and EPA access to information about what other jurisdiction may be doing to address emissions from consumer or commercial products, so that they may build upon the efforts of others. Any State which proposes regulations for a specific category or subcategory of consumer or commercial products which differ from those adopted under section 183(e), shall notify the EPA Administrator of its proposed action and that notice which shall be public shall be treated as a request for relevant clearinghouse information within a reasonable time. Similarly, any State which proposes such regulations, after EPA has proposed or promulgated regulations under this subsection, shall notify the

Administrator if its proposed regulations for the relevant category or subcategory of products differ significantly from those proposed or promulgated by EPA. In either case, States remain free to process and promulgate such regulations.

The Committee is aware of the fact that a number of States have issued or are considering regulations affecting consumer products and of the potential burden which different States standards might impose on manufacturers of products sold nationwide, including imported products. The Committee believes cooperation among the States and with EPA in developing uniform regulation of products in this area is important.

The Committee recognizes that this section potentially provides responsibility for EPA to regulate products which may be regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is the Committee's intention that EPA coordinate any possible regulation under this section of FIFRA-registered products. This subsection is not intended to affect EPA's authority under FIFRA.

Marine vessels.—Under section 183(f) the Administrator is required to promulgate, within two years after the date of enactment of the bill, standards for emissions from loading and unloading marine tank vessels. Such regulations are to require application of reasonably available control technology and are to take effect after the period EPA finds necessary to permit the development of the requisite technology, but no later than two years after promulgation. To the extent practicable, such regulations are to apply to loading and unloading facilities and not to marine vessels. The emphasis on loading and unloading facilities is intended to minimize problems that might be created by subjecting vessels to inconsistent requirements at different ports.

The Department of Transportation (DOT) is required to issue regulations within six months to ensure the safety of the required emission controls. The Coast Guard is currently developing such regulations. After the Administrator promulgates standards under this subsection, any State or locality regulating such emissions must apply standards at least as strict as EPA's. Any State regulations are to be consistent with DOT safety regulations.

Ozone design value study.—Under section 183(g) the Administrator is required to complete, within three years of the date of enactment of the bill, a study on the methodology used to establish the design value for ozone.

Control of interstate ozone air pollution.—Section 184 establishes by operation of law a Northeast ozone transport region commission containing 11 States and the District of Columbia. It runs from northern New England through New York, New Jersey, Pennsylvania, Delaware, and Maryland and into parts of Virginia. The provisions of section 176A apply to this Commission. It must convene within six months of enactment. The membership is the same as other Commissions.

Section 184(b) requires that all States in the ozone transport region submit SIP revisions within two years of enactment, or nine months after the subsequent inclusion of a State in an ozone transport region. The revisions are to include (1) an enhanced inspection and maintenance program, as provided under section 182(c)(3), in metropolitan statistical areas with a population of greater than 100,000 people whether or not the areas are in nonattainment; and (2) implementation of reasonably available control technology with respect to all sources of VOCs covered by a control technique guidance document issued before or after enactment of the Clean Air Act Amendments of 1990. Any stationary source which emits or has the potential to emit at least 50 tons per year of VOCs is to be considered a major source, and subject to the same requirements which would be applicable to major sources if the area were classified as a moderate nonattainment area.

Within three years of enactment the Administrator is to complete a study identifying control measures capable of achieving emission reductions comparable to those achievable through "stage II" vehicle refueling controls, as required under section 182(b)(3). In addition to the SIP revisions described above, the State is to implement such measures identified in the study or to implement stage II vapor recovery as provided in section 182(b)(3). The study is intended to identify other control measures that the State, at its option, can rely upon so long as they achieve emission reductions comparable to those achievable through stage II vapor recovery. Nothing in this provision is intended to bar States choosing to implement a stage II vapor recovery requirement from doing so rather than implementing measures identified in the study required under paragraph (2) of subsection 184(b).

Subsection 184(c) establishes a public procedure and structure through which an ozone transport commission may, by a majority vote of Governors on the Commission, or their designees, transmit recommendations to the Administrator for additional control measures for all or part of the area. The Administrator is to respond to such recommendations, which should be buttressed by supporting material, within nine months with a full or partial approval or disapproval. During this period, EPA will publish the recommendation and provide an opportunity for a hearing.

The Committee expects that the Administrator's review of additional control measures recommended by an ozone transport commission will fully acknowledge and respond to the dimensions of the transport problems addressed by the commission's recommendations.

If EPA disapproves the recommendations, in whole or in part, EPA must specify why any disapproved additional control measures are not necessary for attainment or why they are otherwise not consistent with the Act. EPA must specify all recommendations that are equal or more effective for the Commission to take. Of course, if, despite the EPA approval, any member State of the Commission adopts such additional control measures under applicable State law, the bill does not preclude that.

Upon full or partial approval of any Commission recommendation, the Administrator is to issue to each State, which is a part of the transport region, a finding under section 110 that the State's Implementation Plan is inadequate to meet the requirements of section 110(a)(2)(D) concerning interstate air pollution. The State is to revise its implementation plan within one year after the finding is issued.

Enforcement sanctions for severe and extreme ozone nonattainment areas for failure to attain.—Section 185 provides that SIPs for severe and extreme areas are required to impose an annually adjusted fee of not less than \$5,000 per ton of VOC emissions from major stationary sources (i.e., sources emitting 25 or more tons per year in severe areas and 10 or more tons in extreme areas), in areas that fail to attain by the applicable date. The fee applies to VOC emissions and to NO₅x EMISSIONS AS NECESSARY. THE FEE APPLIES ONLY TO THE EXTENT THE SOURCE FAILS TO REDUCE ITS EMISSIONS BY 20 PERCENT FOLLOWING THE ATTAINMENT DATE. THE FEE BEGINS AT THE ATTAINMENT DATE, AND LASTS UNTIL THE AREA IS REDESIGNATED ATTAINMENT (EXCEPT THAT THE FEE DOES NOT APPLY DURING ANY OF THE ONE-YEAR EXTENSIONS OF THE ATTAINMENT DATE AUTHORIZED UNDER SECTION 181). IF THE ADMINISTRATOR FINDS THAT THE STATE IS NOT COLLECTING THE FEES PROPERLY, THE ADMINISTRATOR MAY COLLECT THEM, WITH INTEREST FOR THE PERIOD WHEN THE FEES WERE NOT PAID TO THE STATE. THE AMOUNT OF THE FEE IS TO BE ADJUSTED EACH YEAR (BEGINNING WITH THE YEAR AFTER ENACTMENT) FOR INFLATION.

The Committee is aware that EPA is currently evaluating the best means of accounting for emissions from sources that operate on an intermittent, cyclical or irregular basis. Because actual emissions from such sources may vary significantly from year to year, actual emissions may not reflect their production activities. The Committee encourages EPA to resolve this problem through regulation or guidance to the States.

Areas with a total population under 200,000 that fail to attain the standard by the applicable date are not subject to the fee in this section if the State demonstrates that ozone transport is the cause of the nonattainment problem, and if the area otherwise meets all of the Act's requirements.

It should be emphasized that this is an enforcement fee related to attainment of severe and extreme ozone areas and that it will not be imposed until the next century. It is a State penalty for failure to attain. EPA's role relates to a default on enforcement by the State. When EPA collects this penalty, the money will go to general revenues.

The bill requires that the States and EPA establish reasonable procedures for the assessment and collection of such fees.

Transitional areas.—Section 185A establishes a transitional status for nonattainment areas that have not violated the ozone standard for the 3-year period from January 1, 1987 to January 1, 1990. The requirements of this subpart are suspended until December 31, 1991, for such areas and the Administrator is directed to determine by June 30, 1992 whether such areas attained the standard by December 31, 1991.

NO₅x and VOC study.—Section 185B requires the Administrator, in conjunction with the National Academy of Sciences, to study and report to Congress on the role of NO₅x AND VOC EMISSIONS IN TROPOSPHERIC OZONE FORMATION. THE STUDY MUST ALSO EXAMINE THE EFFECT OF REDUCING NO₅x AND VOC EMISSIONS ON OZONE LEVELS, THE ROLE OF BIOGENIC VOC EMISSIONS, AND THE BASIC INFORMATION REQUIRED FOR AIR QUALITY MODELS. THE STUDY SHOULD HELP EPA AND STATES IN MAKING DECISIONS ABOUT THE ROLE OF NO₅x REDUCTIONS IN THE VARIOUS PROVISIONS OF THE BILL. FOR EXAMPLE, ALL MODERATE AND WORSE AREAS MUST SUBMIT SIPS SHOWING A 15 PERCENT REDUCTION IN VOCS OVER A 6-YEAR PERIOD. SEC. 182(B)(1)(A)(I) PROVIDES THAT NO₅x REDUCTIONS MUST FORM PART OF THE REQUIRED ATTAINMENT PLAN IN THOSE AREAS AS NECESSARY TO ACHIEVE THE NATIONAL STANDARD. SECOND, ALL SERIOUS AND WORSE AREAS MUST DEMONSTRATE A FURTHER 3 PERCENT REDUCTION IN VOCS ANNUALLY (AVERAGED OVER THREE YEARS) BEGINNING SIX YEARS AFTER ENACTMENT. AGAIN, SEC. 182(C)(2)(C) ALLOWS NO₅x REDUCTIONS TO BE SUBSTITUTED FOR THE REQUIRED VOC REDUCTIONS IN ACCORDANCE WITH GUIDANCE TO BE PROMULGATED BY THE ADMINISTRATOR. FINALLY, SECTION 182(F) REQUIRES THAT THE PLAN PROVISIONS APPLICABLE TO MAJOR STATIONARY SOURCES OF VOCS SHALL ALSO APPLY TO MAJOR STATIONARY SOURCES OF NO₅x. THE PROVISIONS WOULD NOT APPLY TO MAJOR STATIONARY SOURCES OF NO₅x WHERE EPA DETERMINES (WHEN IT APPROVES A SIP) IN NON-OZONE TRANSPORT AREAS THAT NO₅x REDUCTIONS WOULD NOT CONTRIBUTE TO ATTAINMENT IN THE AREA OR, IN OZONE TRANSPORT AREAS, WHERE EPA MAKES THE DETERMINATION THAT ADDITIONAL NO₅x REDUCTIONS WOULD NOT PRODUCE NET OZONE AIR QUALITY BENEFITS. IN ADDITION, THE PROVISIONS WOULD NOT APPLY IN THE CASE OF ANY NO₅x SOURCES FOR WHICH THE ADMINISTRATOR DETERMINES THAT NET AIR QUALITY BENEFITS ARE GREATER IN THE ABSENCE OF SUCH NO₅x CONTROLS.

As is apparent from these provisions, the Committee understands that the role of NO₅x REDUCTIONS IN OZONE NONATTAINMENT AREAS REQUIRE ADDITIONAL REVIEW AND STUDY. THAT IS WHY THE COMMITTEE INCLUDED A SEPARATE NO₅x/VOC STUDY PROVISION IN THIS SECTION TO SERVE AS THE BASIS FOR THE VARIOUS FINDINGS CONTEMPLATED IN THE NO₅x PROVISIONS. THE COMMITTEE DOES NOT INTEND NO₅x REDUCTION FOR REDUCTION'S SAKE, BUT RATHER AS A MEASURE SCALED TO THE VALUE OF NO₅x REDUCTIONS FOR ACHIEVING ATTAINMENT IN THE PARTICULAR OZONE NONATTAINMENT AREA.

Section 104. Additional provisions for carbon monoxide nonattainment areas

Section 104 of the bill adds a new subpart 3 to Part D of Title I of the Clean Air Act, consisting of new sections 186 and 187.

Classification and attainment dates.—Under new section 186(a) CO nonattainment areas are classified by operation of law, as shown below.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Table 5 below provides EPA's most recent data indicating how areas will be classified under this section.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Section 186(a)(3) provides that within 90 days of enactment the Administrator may adjust the classification for any area which would have been classified in another category if the design value were 5 percent greater or 5 percent less to place such area in such other category. In evaluating whether such adjustment is appropriate the Administrator is to consider the number

of exceedances in the area, the level of pollution transport into and out of the area, and the mix of sources and air pollutants in the area.

Section 186(a)(4) authorizes the Administrator to allow up to two one year extensions of the attainment date if the State has met all SIP commitments and has not recorded more than one exceedance of the standard in the year preceding the extension year.

New designations and reclassifications.—Section 186(b) provides that areas subsequently designated nonattainment after the initial designation and classification are to be classified by operation of law in accordance with the table in subsection 186(a)(1).

Reclassification of moderate areas upon failure to attain.—Section 186(b)(2) provides that no later than six months after attainment date, the Administrator is to publish a notice identifying areas failing to attain. Any moderate area failing to attain is to be reclassified by operation of law as a serious area.

Plan submissions and requirements.—Under new Clean Air Act section 187 CO nonattainment areas must meet requirements that escalate in stringency with the severity of the nonattainment problem.

Requirements for Moderate Areas. Under new Clean Air Act section 187(a) moderate areas are required to submit SIP revisions providing for the following:

(1) Inventory.—Within two years of enactment the State is to submit a comprehensive accurate inventory of actual emissions from all sources.

(2) Vehicle miles traveled.—Within two years of enactment moderate areas with a design value of greater than 12.7 ppm at the time of classification as moderate are to include a forecast of vehicle miles traveled (VMT) in the nonattainment area for each year prior to the year for which the plan projects attainment. The forecast is to be based on guidance which the Administrator is directed to develop within six months of enactment. The revision is to provide for annual updates of the forecasts, and annual reports regarding the extent to which such forecasts have proven to be accurate, including estimates of actual VMT for each year for which a forecast was required.

(3) Contingency provisions.—Within two years of enactment, moderate areas with a design value of greater than 12.7 ppm at the time of classification are to submit revisions providing for the implementation of specific measures to be undertaken if any estimate of VMT submitted in an annual report under paragraph 2 of this subsection exceeds the number predicted in the most recent prior forecast, or if the area fails to attain the standard by the attainment date. Such measures are to be adequate to reduce emissions sufficiently to compensate for the increase in VMT above the level forecast, and are to take effect without further action by the State or the Administrator if the prior forecast has been exceeded by an updated forecast or an annual report under paragraph 2, or if the standard is not attained by the deadline.

(4) Vehicle inspection and maintenance.—Immediately after enactment the State is to submit corrections to any vehicle I/M program, as previously required in the area, to assure that the program complies with existing EPA regulations. This requirement parallels the inspection and maintenance requirement applicable to marginal ozone nonattainment areas under section 182(a)(2)(B).

(5) Periodic inventory.—Not later than September 30, 1995, and at the end of each three year period thereafter until attainment, the State is to submit a revised inventory meeting the requirements of paragraph (1) of this subsection.

(6) Enhanced motor vehicle inspection and maintenance.—Within two years of enactment, moderate areas with a design value greater than 12.7 ppm at the time of classification are to submit a revision including provisions for an enhanced motor vehicle

I/M program as required for serious ozone nonattainment areas under section 182(c)(3), except that such program must be for purposes of reducing CO emissions.

(7) Attainment demonstrations and annual emission reductions.—Within two years of enactment moderate areas with a design value greater than 12.7 ppm at the time of classification are to submit a revision providing a demonstration that the plan as revised will provide for attainment of the CO standard by the applicable attainment deadline. The revision is to include provisions for such annual emission reductions as are necessary to attain the standard by the applicable deadline. In the case of moderate areas with a design value of 12.7 ppm or less, other requirements of this subsection apply in lieu of any requirement that the State submit a demonstration that its implementation plan provides for attainment of the standard by the applicable attainment date.

Requirements for serious areas.—Under section 187(b) all serious areas must meet the requirements for moderate areas with a design value of greater than 12.7 ppm, and must also submit provisions within two years to comply with the requirements for transportation control measures, as required for severe ozone nonattainment areas under section 182(d)(1).

Stationary source emission control.—Section 187(c) provides that serious CO nonattainment areas in which stationary sources contribute significantly to CO levels are to submit a plan revision within two years of enactment providing that any stationary source emitting 50 tons per year or more of CO is to be considered a “major stationary source.” The Administrator is to issue guidelines within six months for determining whether stationary sources contribute significantly to CO levels in an area.

The Administrator is authorized on a case-by-case basis to waive any requirements that pertain to transportation controls, auto inspection and maintenance, or oxygenated fuels under Title II, where he determines by rule that mobile sources do not contribute significantly to CO levels in the area.

This subsection is intended to allow areas which are atypical, in that their CO problem comes largely from stationary rather than mobile sources, to have a program more closely tailored to their needs. In such an area, greater stationary source control is warranted, while the programs otherwise provided in this subsection for control of mobile source emissions may not be appropriate or necessary.

Carbon monoxide milestones.—Section 187(d) requires that by March 31, 1966, serious CO nonattainment areas are to submit to the Administrator a demonstration that the area has achieved an aggregate reduction in CO emissions at least equivalent to the total of the specific annual emission reductions required to be achieved by December 31, 1995. The demonstration is to be in such form and manner, and to contain such information and analysis, as the Administrator may require. The Administrator is to determine whether such demonstration is adequate within 90 days, in cases where demonstration contains the required information and analysis.

If the State fails to submit the required demonstration, or the Administrator determines that the State has not achieved the emission reductions required to meet the milestone, the State must, within nine months of such failure or of EPA notice of such failure, submit a plan revision to implement an economic incentive and transportation planning program as required in section 182(g)(4) (concerning economic incentives and transportation planning programs for ozone areas failing to achieve the applicable milestone). The program must be sufficient to achieve the aggregate reduction in emissions set forth in the plan by the attainment date.

Multistate carbon monoxide nonattainment areas.—Section 187(e) provides that States containing a portion of a single CO nonattainment area which covers more than one State are to take all reasonable steps to coordinate air quality planning with other States sharing the multistate nonattainment area.

If a State in which there is located a portion of a multistate nonattainment area fails to make the required demonstration of attainment for such area, the State may, in the period required for such demonstration, petition the Administrator to make a finding that the petitioning State would have been able to make such demonstration but for the failure of one or more other

States, in which other portions of the nonattainment area are located, to commit to implementation of all measures required under section 187. If the Administrator makes such finding, the provisions of section 179, relating to sanctions, do not apply by reason of the failure to make such demonstration. Nothing in this subsection limits the applicability of section 179 with regard to the failure of such petitioning State to comply with any other requirement of Part D, except for the required demonstration of attainment. Nothing in this subsection limits the applicability of section 110(c), regarding Federal implementation plans.

Reclassified areas.—Section 187 provides that moderate areas that are reclassified as serious under section 186(b)(2) must meet the requirements applicable to serious areas. EPA may adjust dates for required submissions where such deadlines are shown to be infeasible. Attainment dates may not be adjusted.

Serious areas that fail to attain.—Section 187(g) provides that any serious area that fails to attain must submit, within nine months of such failure, a SIP to implement a program of economic incentives and requirements as described in section 182(g)(4) (concerning economic incentive programs for ozone areas failing to achieve the applicable milestone). The program must be sufficient, in combination with other elements of the revised plan, to reduce the total tonnage of emissions of CO in the area by at least 5 percent per year in each year after approval of the plan revisions until attainment of the standard.

Section 105. Additional provisions for particulate matter nonattainment areas

Section 105 adds a new subpart 4 to Part D of Title I of the Clean Air Act, consisting of sections 188 through 190.

Initial classifications.—Clean Air Act section 188(a) provides that all PM-10 nonattainment areas will initially be classified as moderate. EPA must publish a notice of the classifications which is not subject to notice and comment or judicial review.

Reclassification as serious.—Clean Air Act section 188(b) provides that the Administrator may redesignate to serious those areas which cannot practicably attain by the moderate attainment date. The Administrator must make such redesignations by December 31, 1991, for areas designated nonattainment under section 107(d)(5), and within 18 months of the due date for the SIP submission for areas subsequently designated nonattainment. Within six months following the applicable attainment date, the Administrator is to determine whether areas have attained by such date, and all moderate areas that failed to attain by the attainment date are to be reclassified by operation of law as serious.

In an April 25, 1990 letter to the Committee, EPA discussed these PM-10 deadlines and the need for reclassification as follows:

Even with the adoption of stringent measures, some areas will not be able to attain the PM-10 standards by the deadline set for moderate areas (December 31, 1994) unless they impose additional, draconian measures that could create real hardships for many people. Under the Administration's original proposal, these areas would be reclassified 'serious.' Although such reclassification would allow additional time for attainment of the standards, it would also require the adoption of more stringent control measures *** Setting an unrealistic, artificial attainment date for these areas will not make them come into attainment faster. Thus, EPA's ability to reclassify certain areas to "serious" is necessary.

Attainment dates.—Section 188(c) provides that all areas must attain as expeditiously as practicable, with the following outside dates. Moderate areas designated nonattainment under section 107(d)(4) must attain no later than December 31, 1994. For all other moderate areas, the attainment date is no later than six years after designation. Serious areas designated nonattainment under section 107(d)(4) must attain no later than December 31, 2001. For all other serious areas, the attainment date is no later than 10 years after the date of designation to nonattainment.

Extension of attainment date for moderate areas.—Section 188(d) authorizes the Administrator to allow up to two one year extensions of the attainment date if the State has met all SIP commitments and has not recorded more than one exceedance of the standard in the year preceding the extension year.

Extension of attainment date for serious areas.—Section 188(e) provides that serious areas may receive an extension of not to exceed five years if the otherwise applicable attainment date would be impracticable, the SIP has been fully implemented, the SIP includes the most stringent measures of any other State's SIP that are feasible for the areas, and the State submits a demonstration of attainment by the most expeditious alternative date practicable. This subsection lists a number of factors that the Administrator may consider in determining whether or not to grant an extension, and in determining the length of any such extension.

One factor mentioned is the “influence” of “transboundary emissions from foreign countries,” such as Mexico. This problem was discussed in two letters to the Committee from EPA. They said:

There are four border areas (near Douglas, Arizona; Calexico, California; Nogales, Arizona; and El Paso, Texas) with PM-10 problems. Of these, El Paso appears to have the most extensive and complex problem.

The City of El Paso, the State of Texas, and EPA are currently finalizing plans for a field study in El Paso that will aid in characterizing the nature and magnitude of the PM-10 problem. Efforts in the El Paso airshed for better understanding of the PM-10 problem are complicated by air quality problems originating in Ciudad Juarez, Mexico—a city of approximately one million people—lying across the international border from El Paso—a city of approximately one-half million people. The two cities, which are essentially one metropolitan area, lie in the same airshed surrounded by mountains and have a desert climate. These facts further complicate our tasks because of the magnitude of nonanthropogenic sources of particulate matter and complex windflow.

* * * * *

It is difficult to enumerate the types and magnitude of sources which are currently located in Juarez, Mexico, since only a limited inventory of these sources is available at present. However, the typical industrial activities in Juarez include electronics, furniture finishing, auto parts manufacturing, auto assembly, manufacturing, cement and brick operations, and smelting. The great majority of these plants are located along the border (Juarez), and they are operated by non-Mexican companies, usually American. Many of these plants locate along the border because of the import laws governing products produced in maquiladoras or twin plants.

The emissions from mobile sources are a significant source of air pollution in the Juarez-El Paso area. Most of the vehicles are old and generally poorly maintained. The motor vehicle population in Juarez is estimated to be 250,000 with the average vehicle being about 13 years old. This average age is about twice the average vehicle age in the United States. In addition to the stationary and mobile sources, area sources such as unpaved roads, unpaved parking areas, open burning (garbage, cardboard, tires, etc.), and wood burning are known to be contributing to the air pollution of the area.

* * * * *

Only limited area quality data are available on the Juarez side of the border. Thus, the extent of air quality problems in Juarez is not well known. We assume that ozone, carbon monoxide (CO), and PM-10 levels are similar to those in El Paso since they are in the same air basin (see the attached graphs). Sampling for TSP and lead (Pb) has been done in Juarez by the Mexican agency, SEDUE, and monitoring for CO and ozone occurs at a site in Juarez. These activities are accomplished through cooperation of the State of Texas (Texas Air Control Board-El Paso) and the El Paso City-County Health Department which performs periodic Pb analyses on Juarez filters. Data completeness has been disappointing because of personnel and electric power problems in Juarez. However, a FY 1989 cooperative sampling/monitoring effort is under way with EPA loaning equipment to SEDUE for Juarez monitoring and giving logistics support.

Another major problem is the lack of a good emission inventory in the Juarez area. These problems are not unique to the El Paso/Juarez area. Other Group I areas in Arizona and California along the U.S./Mexican border face similar problems of limited air quality data and lack of good emission inventories.

* * * * *

The EPA's primary and specific goal in the El Paso area is to plan and implement emission control strategies for reducing concentrations of ozone, CO, and PM-10 below the respective NAAQS. The important fact is that El Paso and Juarez are located in one single air basin. Therefore, any emission control strategy(ies) to effectively reduce air pollution below the respective NAAQS in El Paso must deal with the emissions in the Juarez area. The problems caused by sources on the United States side can be effectively addressed through a SIP for achievement of the desired goal; however, the following efforts on the Mexican side are essential for the success of air pollution control in El Paso:

Acquisition of an accurate emissions inventory for all Juarez major sources and accurate estimates for area and mobile sources.

Ambient monitoring/sampling of the pollutants and crucial meteorological parameters at selected Juarez sites.

Using the two statements above and corresponding data from El Paso County, performance of air dispersion modeling analyses and/or receptor modeling analyses in order to determine the degree of control necessary for sources, given several different scenarios, for attainment of all NAAQS in El Paso County.

Assessing the extent and cost of necessary industrial controls in Juarez by means of a survey of sources in Juarez for the applicability of new source performance standards.

Devising and implementing a plan for relatively short-term changes in management practices and simple and quickly initiated controls for selected Juarez industrial/commercial enterprises.

Devising and implementing a long-term plan for control of major stationary, area, and mobile sources in Juarez sufficient to attain all NAAQS in El Paso County.

The proposed Annex V to the 1983 U.S.-Mexico Environmental Agreement, if approved, will enable both countries to initiate the first comprehensive emissions inventory in Juarez.

Waivers for certain areas.—Section 188(f) provides that the Administrator may waive any requirement applicable to a serious area, if he determines that anthropogenic sources of PM-10 do not contribute significantly to the PM-10 problem in that area. Similarly, EPA may waive the requirement of a specific attainment date where the Administrator determines that nonanthropogenic sources of PM-10 contribute significantly to the problem. The attainment date may only be waived for areas that have fully implemented their plan requirements under this section.

The term “anthropogenic sources” is intended to include activities that are anthropogenic in origin. An example of such sources is the dry lake beds at Owens and Mono Lakes in California, which give rise to dust storms that are a result of the diversion of water that would otherwise flow to such lakes and should be considered anthropogenic sources. The Committee notes that in an August 2, 1989 letter to a California official, EPA commented about Mono Lake as follows:

The Environmental Protection Agency (EPA) is concerned about the extremely high concentrations of PM-10 occurring within the Great Basin Unified Air Pollution Control District. EPA agrees that the cause of this severe nonattainment problem in dust blowing from the Owen's Dry Lake Bed and from the exposed portions of the Mono Lake shoreline. Furthermore, EPA is aware of the well-developed body of evidence supporting the conclusion that such high concentrations of this extremely fine dust have been generated by the continued diversion of water that would normally have flowed into the Mono and Owens Lakes. At this time, EPA is not aware of any credible argument or evidence that refutes your conclusion that this particular PM-10 problem is anthropogenic in origin and thus is subject to control. We therefore support your efforts to develop innovative emission control programs for both lakes.

Also, in a September 12, 1989 letter to the Committee, EPA reiterated this view and added:

Furthermore, on August 9, 1989, representatives from the Los Angeles Department of Water and Power met with my staff. During that meeting, the representatives agreed that the PM-10 problems in the subject areas would not occur, or at least would not be as severe, if the city did not divert the water which would normally flow into the lakes. They reaffirmed their Department's commitment to work with the Greak Basin Unified Air Pollution Control District to mitigate the PM-10 air quality problem.

Requirements for moderate areas.—Section 189(a) provides that moderate areas are to submit revisions to their SIPs that require a new source review permit program meeting the requirements of section 172 and section 173, and submit either a demonstration that the plan will provide for attainment by the attainment date, or a demonstration that attainment by that date is impracticable. In addition, moderate areas must include in their submission provisions to require that reasonably available control measures for the control of PM-10 emissions be implemented no later than December 10, 1993, or four years after designation in the case of a areas classified as moderate after enactment of this subpart. Such provisions must include the application of reasonably available control technology to existing stationary sources. The plan submissions required in this subsection are to be submitted not later than one year after enactment for areas designated nonattainment under section 107(d) (4), except that provisions for the new source review program required under section 189(a)(1)(A) are to be submitted no later than June 30, 1992.

Serious areas.—Section 189(b) provides that serious areas must meet the requirements applicable to moderate areas, and provide either a demonstration that the plan will provide for attainment by the attainment date, or (for those areas for which the State is seeking an extension) a demonstration of attainment by the most expeditious alternative date practicable. In addition, serious areas must include in their submission provisions to require that the best available control measures for the control of PM-10 emissions are implemented no later than four years after the area is classified or reclassified as serious. Such provisions must include the application of the best available control technology to existing stationary sources. The plan demonstration of attainment required in this subsection must be submitted not later than four years after reclassification of the area to serious, except that for areas reclassified under section 188(b)(2) such demonstration shall be due within 18 months after reclassification to serious. The provisions for implementation of the best available control measures are to be submitted no later than 18 months after reclassification of the area to serious and implemented no later than four years after such reclassification.

Section 189(b)(3) provides that for serious areas the terms “major source” and “major stationary source” apply to all sources included in the section 302 definition of major stationary source, as well as any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit 70 tons or more per year of PM-10. There are three principal effects of this definitional change: (1) new or modified sources emitting 70 tons or more per year of VOCs will be subject to new source review requirements; (2) existing sources emitting 70 tons or more per year of VOCs will be subject to RACT requirements; and (3) all sources emitting 50 tons or more per year of VOCs, whether new, modified, or existing, will be subject to permit requirements under Title IV. Our comments earlier in this report about this definition apply here also. It is not the Committee's intent that natural gas pumping stations or other natural gas facilities connected by a pipeline but not otherwise located within a contiguous area and under common control should be grouped together and considered a single source under this provision.

PM-10 milestones.—Section 189(c) establishes a milestone program for PM-10 areas. Plan revision demonstrating attainment under this section are required to include quantitative emission reduction milestones to be achieved every three years until the area is attained. Such milestones are to provide for emission reductions adequate to achieve the standards by the applicable attainment date.

Paragraph 189(c)(2) requires States to submit to the Administrator not later than 90 days after the date on which the applicable milestone occurs a demonstration that the aggregate required emission reductions from the date of enactment to the milestone

date have been achieved. The demonstration is to be in such form and manner, and contain such information and analysis, as the Administrator requires by rule. The Administrator is to determine the adequacy of a demonstration under this subsection within 90 days of receipt of a demonstration containing the required information and analysis.

Under paragraph 189(c)(3) if a State fails to submit the demonstration required under this subsection within the required period, or if the Administrator determines that such area has not met the applicable milestone, the State is to submit within nine months a plan revisions providing for emission reductions from specific additional measures adequate to meet the next milestone, including compensation for any existing emission reduction shortfall, or to attain the standard by the applicable attainment date if there is no next milestone.

Failure to attain.—Section 189(d) provides that where a serious PM-10 nonattainment area has not attained by the attainment date, the State must submit within 12 months plan revisions which provide for the attainment of the PM-10 standard as expeditiously as practicable, and which include a program of specific emission reduction measures sufficient, in combination with other elements of the revised plan, to reduce the total tonnage of emissions of PM-10 in the area by at least 5 percent per year in each year after submission of the plan revisions until attainment of the standard.

Control of PM-10 precursors.—Section 189(e) provides that the control requirements in effect under this part for major stationary sources of PM-10 are also to apply to major stationary sources of PM-10 precursors, except where the Administrator determines that such sources do not contribute significantly to PM-10 levels which exceed the standard in the area. The Administrator is to issue guidelines for control of PM-10 precursors under this subsection. The Committee notes that some of these precursors may well be controlled under other provisions of the Act.

The Committee intends that in developing the guidelines required in this section, the Administrator will develop models, mechanisms, and other methodology to assess the significance of the PM-10 precursors in improving air quality and reducing PM-10. Additionally, the Administrator should consider the impact on ozone levels of PM-10 precursor controls.

The Committee expects the Administrator to harmonize the PM-10 reduction objective of this section with other applicable regulations of this Act regarding PM-10 precursors, such as NO₅x.

Issuance of RACM and BACM guidance.—Section 190 directs the Administrator to issue technical guidance on reasonably available control measures and best available control measures for urban fugitive dust, emissions from residential wood combustion, and prescribed silvicultural and agricultural burning no later than 18 months after enactment. The guidance is to be issued in the same manner and procedure as guidance issued under section 108(c). The Administrator is to examine other categories of sources contributing to PM-10 nonattainment, and issue such further guidance as he determines is necessary within three years of enactment.

In this connection, the Committee observes that EPA allows the use of intermittent control measures (i.e., temporary measures used as necessary to prevent high ambient concentrations). In a December 30, 1988 letter to the Oversight and Investigations Subcommittee, EPA said they “have limited effectiveness, but, in some cases, may be the only techniques available.” In a subsequent letter of April 20, 1989, EPA expanded on this statement:

Section 123 limits the credit areas can receive for the use of dispersion techniques. Specifically, section 123 states that the emission limitations required to be in the SIP shall not be affected by any dispersion techniques implemented after December 31, 1970. One of the dispersion techniques mentioned in section 123 is varying the rate of emissions based upon atmospheric conditions.

On February 8, 1982, EPA published regulations to implement the provisions of section 123(47 FR 5864). At that time, EPA excluded from the definition of a dispersion technique the use of smoke management in agriculture and silviculture practices. On July 8, 1985, EPA published major revisions to those regulations (50 FR 27892). In addition to retaining the exclusion for

smoke management, EPA added an exclusion for episodic curtailment of residential wood combustion. In responses to a public comment on EPA's authority for these exemptions, EPA said:

We believe that such exemptions are justified for several reasons. The language of the Clean Air Act, the legislative history, and past court decisions are limited explicitly to discussions of stationary sources.*** [U]nlike the use of intermittent control strategies by stationary sources to avoid the application of constant emission controls, episodic restrictions on the activities described above do not substitute for other techniques to reduce ambient pollutant concentrations, but rather represent the only feasible type of control that could be imposed on these activities. [Response to Comments on the November 9, 1984 proposed Stack Height Rules at page 91.]

The use of dust suppressants, including water, and the removal of sand and dirt are not dispersion techniques. Although the need for either measure could be affected by atmospheric conditions, the application of these techniques is triggered by the rate of emission of the dust, and not specifically by the atmospheric conditions. Thus, EPA does not consider the use of these measures to be affected by the limitation of credit for dispersion techniques in section 123.

A third type of noncontinuous control is the use of seasonal controls, such as the seasonal use of oxygenated fuels. Seasonal controls are implemented during a specific predetermined period of the year, and do not vary with specific atmospheric conditions. Thus, EPA also does not consider the use of these seasonal controls to be limited by section 123. Because of the need to demonstrate continuous attainment of the standards and the difficulty in enforcing many types of seasonal controls, EPA has approved only a very limited number of such measures.

In regards to "residential wood combustion," EPA's letters stated:

We prefer the term "residential wood combustion" to include both wood stoves and open fireplaces. However, in most areas with high PM-10 levels, wood stoves contribute more to ambient concentrations because wood stoves are designed to restrict the quantity of air entering the fire box. While this produces greater heat transfer into the house, it also increases particulate matter emissions. Fireplaces, on the other hand, do not restrict the flow of air into the fire and, thus, combustion tends to be more complete. In addition, fireplaces are generally used for aesthetic purposes and not as a primary heat source. In evaluating the sources of PM-10, a State should consider the number of fireplaces, the number and type of wood stoves, and the amount of wood burned in each appliance.

* * * * *

Control measures for existing residential wood combustion units fall into three general categories: technical improvements in the unit's performance, temporary curtailment of use during periods of adverse meteorology, and permanent shutdown or replacement.

Regrettably, retrofitting existing wood stoves with control devices has not proven to be effective. To achieve reductions in emissions from both old and new technology stoves, homeowners must become aware of methods to operate their fireplaces and wood stoves to burn more cleanly. We are working with the American Lung Association to develop public education materials on good wood burning techniques.

Temporary curtailment programs have been used effectively in some areas to reduce peak concentrations. Two types of programs are used: voluntary and mandatory. Voluntary programs generally result in lower emission reductions but meet less public opposition, while mandatory programs can result in greater reductions but are often unpopular and are more difficult to implement. In the Denver metropolitan area, for example, local governments, representing 50 percent of the area's population, have adopted mandatory curtailment of wood burning on high pollution days. In addition, programs to shut down or replace existing units are being carried out in several other areas. Some programs provide incentives for homeowners to convert to another form of heat or to install a cleaner-burning wood stove. Other programs require conversion at a specific time, such as when the house is sold, or by a specific date.

Revised PSD increments.—Section 105(f) of these amendments amends Clean Air Act section 166 to authorize the Administrator to substitute PM-10 increments of equal stringency for the total suspended particulate matter increments provided for in part C of existing law. Until the Administrator revises such increments, the current maximum allowable increases in particulate matter concentrations are to remain in force.

Section 106. Additional provisions for areas designated nonattainment for sulfur oxides, nitrogen dioxide, and lead

Section 106 adds a new subpart 5 to Part D of Title I of the Clean Air Act, consisting of new sections 191 and 192. This subpart establishes SIP submittal and attainment dates for areas that need to do additional planning to attain the SO₂, NO₂, AND PB STANDARDS.

Plan submission deadlines.—Section 191 provides that areas that are newly designated nonattainment for one of these pollutants after enactment of the bill need to submit a new plan within 18 months of the designation. Such plans must demonstrate attainment within five years of the designation. Areas that are currently designated nonattainment for SO₂ OR NO₂ BUT WHICH NEVER RECEIVED FULL APPROVAL OF THEIR SIPS UNDER THE CURRENT LAW HAVE TO SUBMIT CORRECTIVE SIPS WITHIN 18 MONTHS OF ENACTMENT SHOWING ATTAINMENT WITHIN FIVE YEARS OF ENACTMENT.

Attainment dates.—Under section 192, areas that have approved SIPs but have received (or in the future receive) SIP calls for one of these pollutants must provide for attainment within five years of the date of the SIP call.

Section 107. Provisions related to Indian tribes

Section 107 includes a series of provisions authorizing the Administrator to treat Indian tribes as States for certain purposes, including, under certain circumstances, allowing tribes to develop implementation plans and receive grants.

Authority to treat tribes as States.—Under Section 301 the Administrator is authorized to treat tribes as States for Clean Air Act purposes and for providing financial assistance (although tribes are not entitled to the minimum of one-half of one percent of annual appropriations to which States are entitled under Section 105). EPA must promulgate regulations outlining the circumstances under which treatment as a State is appropriate for tribes and procedures for approving tribal implementation plans. If treatment as a State is inappropriate, the Administrator may devise other means of administering the Clean Air Act on reservations. The receipt of grants is not contingent on the promulgation of regulations so that, until EPA promulgates regulations, EPA may continue to give grants to tribes.

Grant eligibility.—Clean Air Act Section 105(a)(1)(B) provides that tribes are eligible to receive air grants by including tribal air pollution control agencies in the list of agencies eligible to receive grants. At his discretion, the Administrator may decide which of the eligible tribes shall receive grants.

Definition of “Air Pollution Control Agency”.—Clean Air Act Section 302(b) broadens the definition of air pollution control agencies to include those of Indian tribes.

Tribal implementation plans.—New section 110(t) provides that tribal implementation plans are to be reviewed in the same manner as SIPs. When plans become effective, they shall apply within the exterior borders of the reservation.

Section 108. Miscellaneous provisions

Section 108 includes a number of miscellaneous amendments to Title I of the CAA, including, among others, the following:

Transportation guidance.—Section 108(a) provides that within nine months and periodically thereafter the Administrator, after consultation with the Secretary of Transportation and State and local officials, is to update the transportation-air quality planning guidelines issued in 1978, at the start of the initial Part D planning process. Within one year the Administrator is required to publish guidance on 15 listed transportation controls.

In developing their SIPs, attainment and nonattainment areas may adopt transportation control measures selected from among those listed in section 108(a)(2) of the bill (section 108(f) of the Act). Consistent with the requirement of the Act, the State shall ensure adequate access to downtown and other commercial areas, and avoid measures that increase or relocate emissions and congestion in place of reducing such emissions and congestion. There is no presumption that every measure on the list will in fact result in reduced emissions in every area.

RACT/BACT/LAER clearinghouse.—Section 108(b) of the Amendments adds a new section 108(k) to the Clean Air Act which directs the Administrator to make information regarding emission control technology available to the States and the general public. Such information is to include all control technology information received pursuant to State plan provisions requiring permits for sources, including operating permit programs for existing sources as well as new source permit programs. The clearinghouse is to include comprehensive data on reasonably available control technology control requirements, best available control technology control requirements, and lowest achievable emission rate control requirements proposed or adopted in each State.

State reports on emission-related data.—A new Clean Air Act section 110(u) is added in section 108(k) of these amendments, which requires that States submit any reports that the Administrator may require to assess the effectiveness of any SIP or SIP revision.

New source performance standards (NSPS).—Section 108(d) amends Clean Air Act section 111 to extend the timeframes for developing proposed and final regulations establishing NSPS. The schedules for completion of the NSPS for source categories that EPA has already listed for regulation, and for revision of existing NSPS are updated and extended. The Administrator is authorized to waive review of a standard if review is not necessary in light of readily available information.

Section 111(b)(1)(B) is also amended to provide that whenever implementation and enforcement of any requirement of this Act demonstrates that emission limitations and percent reductions beyond those required by the standards promulgated under section 111 are achieved in practice, the Administrator shall, when revising such section 111 standards, consider the emission limitations and percent reductions achieved in practice.

Stationary engines not to be covered under title II as nonroad engines.—Section 108(e) of the amendments clarifies the coverage of the nonroad engine provisions of Title II of this Act by specifying that nothing in Title II related to nonroad engines may be construed to apply to stationary internal combustion engines. The Committee intends this language to make clear that States are not preempted from regulating stationary internal combustion engines which shall be identified by EPA by the nonroad provisions in section 210 of these amendments.

Definitions.—Section 302 of the Clean Air Act is amended in section 108(i) of the amendments to establish definitions for a variety of terms including VOC, PM-10, NAAQS, NO₅x, CO, AND SMALL SOURCE.

Also defined in the term “Federal Implementation Plan.” New subsection 302(y) of the Act specifies that “federal implementation plan” means a plan, or portion thereof, promulgated by the Administrator to fill a gap, or otherwise correct an inadequacy in a SIP, including establishment of a plan in conformity with the provisions of this Act when the State has failed to do so. Such Federal implementation plan is to include enforceable emission limits or other control measures, means of techniques, and is to provide for attainment of relevant NAAQS. This definition clarifies that where a State does not have an

implementation plan that provides for attainment of the NAAQS as required under this Act, the Federal implementation plan must provide for such attainment.

In addition, section 302(g) of the act is amended to clarify that the term “air pollutant” includes any precursors to the formation of any pollutant.

Pollution prevention.—Section 108(j) of the Amendments amends section 101 of the Act to specify that, consistent with the provisions of the Clean Air Act, pollution prevention is a primary goal of the Act.

General savings clause.—Section 108(k) of the Amendments adds a new Clean Air Act section 193 which provides that all regulations, standards, rules, orders, notices or guidance promulgated or issued under the Act, as in effect before the date of enactment of these amendments are to remain in effect, except as otherwise explicitly provided under this Act or to the extent inconsistent with any provision of this Act. Section 108(k) also expressly provides that no control requirement in effect by its terms before and after enactment of this section, or required to be adopted by an order settlement agreement or plan in effect before enactment of this section, in any area which is a nonattainment area for any air pollutant, may be modified after enactment of this section in any manner, unless such change in the control requirement insures equivalent or greater emission reductions for such air pollutant.

The antibacksliding language in this section prohibits the relaxation of control requirements currently in effect, or required to be adopted by any order, settlement agreement, or plan currently in effect after enactment of the Clean Air Act Amendments of 1990. Although many nonattainment areas are allotted additional years before they must attain ambient air quality standards under these amendments, all areas must continue to use pollution control measures already in place or scheduled to be put in place, as well as those additional measures required under this Act, in order to assure attainment as expeditiously as practical.

PSD boundary changes.—Sections 162 and 164 of the Clean Air Act are amended to revise the boundaries of class I areas to reflect changes in the boundaries of such areas subsequent to enactment of the Clean Air Act Amendments of 1977, or which may occur subsequent to the enactment of these amendments.

Assessment of risks to ecosystems.—Section 108(n) of the Amendments adds a new subsection 108(g) to the Act which provides that the Administrator may assess the risks to ecosystems from exposure to criteria air pollutants.

Information for small sources.—A new Clean Air Act section 129 is established directing the Administrator to undertake an information gathering and dissemination program, and an education program to provide technical and other assistance to small sources and help them to understand their obligations under this Act.

Interstate pollution.—Section 126 of the Clean Air Act, concerning interstate air pollution, is amended to provide that when evaluating the impact of one State's emissions on another State under this section, it is not necessary to focus only on the impacts of a single major source. The evaluation of whether pollution from one State is having a greater than permissible impact on another State is to extend as well to a group of stationary sources.

Air pollution effects on welfare.—Section 302(h) of the Act, concerning effects on welfare, is revised to clarify that such effects include effects caused by pollutant transformation, conversion, or in combination with other air pollutants. This change makes clear that welfare effects extend to consequences of air pollutant emissions that may occur after the pollutant has been chemically altered following its release, and to effects caused by the combined impacts of air pollutants.

Title II: Provisions for Control of Mobile Source Emissions

INTRODUCTION

Title II of the bill contains provisions to control emissions from "mobile sources."

BACKGROUND

Nationally, mobile sources, including older vehicles, are, according to OTA's 1989 report, responsible for roughly 40-45 percent of all VOC emissions and 45 percent of NO₅x EMISSIONS. THEY ARE RESPONSIBLE FOR APPROXIMATELY TWO-THIRDS OF THE CO POLLUTION AND, ACCORDING TO EPA, MOBILE SOURCES, INCLUDING FUELS, CAUSE INCIDENCES OF CANCER.

SUMMARY OF TITLE II

Mobile sources and ozone and carbon monoxide pollution

As discussed previously in this report, emissions of VOCs and NO₅x REACT IN THE ATMOSPHERE TO FORM OZONE. IN TOTAL, MOBILE SOURCES EMIT A LITTLE LESS THAN HALF OF THE NATIONAL INVENTORY OF EMISSIONS OF THESE TWO PRECURSORS. HOWEVER, IT SHOULD BE NOTED THAT "MOBILE SOURCE" EMISSIONS ARE NOT JUST CAR AND TRUCK EMISSIONS. EPA USES THE TERM FOR ALL "MOVING" SOURCES OF EMISSIONS. WHILE CARS AND TRUCKS-HIGHWAY VEHICLES-ARE THE LARGEST SINGLE COMPONENT OF MOBILE SOURCES, AIRPLANES, TRAINS, MARINE VESSELS, OFF-HIGHWAY AND OTHER VEHICLES CONTRIBUTE.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

EPA's March 1990 Draft "Air Quality Criteria for Carbon Monoxide" indicates that a "major component" of total personal CO is "exposure while indoors." In recent "extensive total personal CO exposures studies," EPA said the "highest CO concentrations occur in indoor microenvironments associated with transportation sources." EPA said:

Concentrations in these environments frequently were found to exceed 9 ppm. Studies targeted toward specific indoor microenvironments have also identified the indoor commuting microenvironment as one in which CO concentrations frequently exceed 9 ppm and occasionally exceed 35 ppm. Similar concentrations have been reported in special environments or accompanying unusual occurrences (indoor ice skating rinks, offices where emission from parking garages migrate indoors, etc.).

* * * * *

The available data on the spatial and temporal variability of indoor CO concentrations as a function of microenvironments and associated sources are not adequate to assess exposures in these environments. These indoor microenvironments represent the most important CO exposures for the majority of individuals and as such need to be better characterized.

EPA also provided a summary of those subpopulations potentially at risk to CO:

Most of the information on the human health effects of carbon monoxide discussed in this document has concentrated on two carefully defined population groups-young healthy, predominantly male adults and patients with diagnosed coronary artery disease. On the basis of the known effects described, patients with reproducible exercise-induced angina appear to be best established as a sensitive group within the general population that is at increased risk for experiencing health effects (i.e., decreased exercise duration due to exacerbation of cardiovascular symptoms) of concern at ambient or nearambient CO-exposure concentrations that result in COHb levels of 6#5%. A SMALLER SENSITIVE GROUP OF HEALTY INDIVIDUALS EXPERIENCE DECREASED EXERCISE DURATION AT SIMILAR LEVELS OF CO EXPOSURE, BUT ONLY DURING SHORT-TERM MAXIMAL EXERCISE. DECREMENTS IN EXERCISE DURATION IN THE HEALTHY POPULATION, THEREFORE, WOULD BE MAINLY OF CONCERN TO COMPETING ATHLETES RATHER THAN FOR NONATHLETIC PEOPLE CARRYING OUT THE COMMON ACTIVITIES OF DAILY LIFE.

It is known, however, from both theoretical work and from experimental research in laboratory animals that certain other groups in the population are at potential risk to exposure from CO. Another purpose of this document is to explore the potential effects of CO in population groups that have not been studied adequately, but which could be expected to be susceptible to CO because of underlying physiological status either due to gender differences, aging, preexisting disease, or because of the use of medications or alterations in their environment. These probable risk groups include (1) fetuses and young infants; (2) pregnant women; (3) the elderly, especially those with compromised cardiopulmonary or cerebrovascular functions; (4) individuals with obstructed coronary arteries, but not yet manifesting over symptomatology of coronary artery disease; (5) individuals with congestive heart failure; (6) individuals with peripheral vascular or cerebrovascular disease; (7) individuals with hematological diseases (e.g., anemia) that affect oxygen-carrying capacity or transport in the blood; (8) individuals with genetically unusual forms of hemoglobin associated with reduced oxygen-carrying capacity; (9) individuals with chronic obstructive lung disease; (10) individuals using medicinal or recreational drugs having CNS depressant properties; (11) individuals exposed to other pollutants (e.g., methylene chloride) that increase endogenous formation of CO; and (12) individuals who have not been adapted to high altitude and are exposed to a combination of high altitude and CO. Unfortunately, little empirical evidence currently is available by which to specify health evidence associated with ambient or near-ambient CO exposures in these probable risk groups.

On February 28, 1989, Dr. Phillip A. Bromberg testified:

The fetal central nervous system is particularly susceptible to CO. Delayed or possibly even long-term impairment of neurological and intellectual development has been suggested to result from maternal smoking during pregnancy (Dept. of Health, Education and Welfare, 1979; U.S. EPA, 1979; Longo, 1977). Studies in rats of Fechter and his colleagues support the notion that modest levels of maternal CO exposure may find the fetus extraordinarily susceptible to the development of irreversible neural changes (Fechter and Annau, 1977 and 1980; Mactutus and Fechter, 1984 and 1988; Dyer et al, 1979). Fechter (1984) has reviewed the effects of CO exposure on early fetal development.

Mobile sources contribute significantly to toxic emissions

Although cars and trucks are best known for their VOC, NO_x, AND CO EMISSIONS, THERE ARE OTHER COMPOUNDS EMITTED THROUGH THE COMBUSTION OF FUELS AND SOME ARE TOXIC. ON OCTOBER 19, 1989, EPA'S ASSISTANT ADMINISTRATOR, MR. WILLIAM G. ROSENBERG, SAID:

Motor vehicles account for approximately 50 percent of all toxic air problems. Data recently released by EPA indicate that 2.7 billion pounds of toxic chemicals are emitted into the air each year from large stationary sources. Our upper-bound estimate is that total toxic emissions contribute to approximately 1500 to 3000 fatal cancers annually. Air toxics can also be associated with respiratory disease and birth defects. The most important air toxics from vehicles include particulate matter, benzene, and butadiene.

There are four principal toxic emissions from motor vehicles that stem from diesel and gasoline fuel. They are: polycyclic organic matter (POM), including exhaust particulates, 1,3-butadiene, benzene, and formaldehyde.

Diesel particulates form from incomplete combustion of diesel fuel. The particulates have a carbon core with hundreds of absorbed organic compounds onto which bits of fuel, lubricants, and combustion products are absorbed. The particles' small diameters (90 percent are less than 1 micron) mean that they can be inhaled and deposited deep within the lungs.

Although gasoline powered vehicles emit far less particulate matter than diesel powered vehicles on a grams per mile basis (30 to 100 times less), in the aggregate they may pose toxicity problems similar to diesel particulates.

Next to emissions of diesel and gasoline particulates, emissions of 1, 3-butadiene from mobile sources cause the greatest aggregate health threat, according to EPA's analysis. Butadiene is one of the most potent organic carcinogens—and mobile sources are by far the greatest single source of the pollutant.

Butadiene is emitted both in the exhaust of gasoline vehicles (butadiene is roughly 0.5 percent of the hydrocarbon content of the exhaust) and from tire wear.

Motor vehicles, through the combustion of fuels, are also the major source of benzene emissions nationally, emitting 85 percent of the national inventory. These emissions come from vehicle exhaust (70 percent of the national inventory), gasoline evaporation (14 percent), and refueling (1 percent). The benzene level of gasoline is about 1 percent to 2 percent and the benzene level in the exhaust of gasoline cars is about 2 percent to 5 percent of the hydrocarbon emissions. Most benzene in motor vehicle exhaust forms from engine combustion of nonbenzene aromatics in gasoline, not from the incomplete combustion of benzene itself. Diesel vehicles contribute 3 percent of the total benzene emitted from motor vehicles.

EPA's September 1987 report on "Air Toxics Emissions from Motor Vehicles" states:

The aggregate risk from mobile source pollutants in calendar year 1986 was estimated to range from 1.80–10.58 per urban million. This translates into roughly 325–1900 urban cancer incidences. The majority of risk is attributed to formaldehyde, diesel particulate, and benzene. Due to increasing use of advanced control technology, the risk in 1995 is projected to decrease to roughly 60 percent the risk in 1986.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Benzene emissions from vehicles cause leukemia and other forms of cancer—up to 10 percent of the motor vehicle cancer cases each year, according to EPA.

Formaldehyde is directly emitted in the exhaust of both gasoline and diesel vehicles. It also forms in the atmosphere as a result of photochemical reactions involving other motor vehicle exhaust or evaporative emissions. Direct formaldehyde emissions from motor vehicles amount to approximately 35 percent of the national inventory, although in some regions the motor vehicle contribution can be much greater (60 percent in California, for example).

Formaldehyde exhaust emissions can cause cancer, as well as acute adverse health effects, including eye, nose, and skin irritation, headaches, and nausea.

Motor vehicles also emit from exhausts and brakes, other toxic substances, including acetaldehyde, asbestos, cadmium, and ethylene dibromide. Collectively, these other toxic emissions may account for 5 percent of the total motor vehicle cancers, according to the EPA data. Some of these, like asbestos, are being phased out. Ethylene dibromide for leaded fuel which has all but disappeared from the market.

The competing effects of fleet turnover, increased vehicle miles travelled and small stationary sources

In the absence of new standards, the turnover of the existing fleet of vehicles will reduce emissions from highway vehicles because cleaner new vehicles will replace older vehicles. However, OTA observes that emissions will still increase:

Although the number of vehicle-miles-traveled is forecast to increase in many areas over this period, the gradual replacement of current vehicles with newer, cleaner ones will result in an overall decline in highway vehicle emissions. * *

* VOC emissions from highway vehicles are projected to decline by about 25 percent between 1985 and 1999. Stationary source emissions, on the other hand, are forecast to increase steadily between 1985 and 2004, showing a 10-percent increase by 1994 and a 23-percent increase by 2004, over 1985 levels. Growth of small (less than 50 ton-per-year) stationary VOC source emissions is one of the most important reasons why overall VOC emissions are not expected to decline more rapidly

in the earlier years and why total emissions may show a net increase after 1999. This source category effectively offsets much of the emissions reduction realized from highway vehicles.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The best estimates are that in comparison to today's levels—and in the absence of any new standards—VOC exhaust emissions from highway vehicles (cars, truck, and motorcycles) will drop about 30 percent by the late 1990s and then turn upwards. The level of future emission increases will ultimately depend on overall growth in vehicle miles travelled (VMT) because the Act's emission standards are set on the basis of grams per mile. The more miles the public travels in urban, rural and open highway areas, the more grams in total are emitted nationwide.

VMT growth is currently expected to average about 2.5 percent each year, although some estimates (such as from the Highway Users Federation) predict VMT growth to average 6 percent each year, except in the most congested urban areas with the most ozone nonattainment problems.

NO₅x and CO exhaust will follow a similar pattern without new controls, but with fewer emission reductions. By the late 1990s, for example, NO₅x emissions from highway vehicles should drop about 15 percent and then turn upwards. At VMT growth of 2.5 percent NO₅x emissions would exceed today's levels shortly after 2005.

The history of mobile source controls

The 1970 Clean Air Act forced technological innovation on the foreign and domestic automobile industry. It required EPA to set tailpipe standards that reduced hydrocarbon (HC), nitrogen oxide, and CO pollution in automobile exhaust by a least 90 percent from 1970 baseline which includes some controls on HC and CO emissions. No technology existed at the time to meet the 90 percent standards. EPA by rule set and exhaust standard of 0.41 grams per mile (gpm) for HC emissions. It set a standard of 0.4 gpm for NO₅x, which was subsequently relaxed in the 1977 Clean Air Act Amendments to 1.0 gpm. And it set a standard of 3.4 gpm for CO. The theory was that the 1970 standards would force the development of brand-new technology.

The theory worked. The industry responded by developing the “catalytic converter,” which fits on the end of the tailpipe and converts HC, NO₅x, and CO into carbon dioxide, water vapor, and nitrogen gas. The original standards, as amended in 1977, remain in effect today. However, these specific standards and technology have, not as yet, achieved the 90 percent of 1970 in all cases and the number of recalls annually by foreign and domestic companies indicates some of the difficulty in meeting even current standards in use. On the other hand, there is testimony that the standards can easily be met.

The Act gave EPA a rulemaking mandate to set specific numerical standards for trucks and buses. The most recent truck and bus standards were promulgated in 1985. They vary according to the weight of the vehicle and are phased in for some vehicle classes as provided in the Act.

The Federal standards must be met at “certification,” when the vehicle comes off the assembly line, and “in-use” for the “useful life” of the vehicle. The current Act defines the useful life of a car as five years or 50,000 miles of use, whichever comes first. EPA has defined useful life as 11 years or 120,000 miles in the case of light-duty trucks and as even longer (up to 285,000 miles) in the case of some heavy-duty trucks.

As a practical matter, compliance with the standard in use is controlling. In order to meet the applicable standards in-use and avoid recall, new vehicles regularly certify at levels well below such standards.

In general, EPA has not regulated the emission of toxic substances by motor vehicles or fuels directly, but monitors the emissions and many of the toxics are reduced principally as a direct consequence of the HC standard. For instance, benzene, butadiene, and formaldehyde are types of hydrocarbons. As a result, they are controlled, at least in part, by tailpipe standards limiting exhaust emissions of hydrocarbons.

In some instances, however, controls on criteria pollutants (HC, CO, NO₅2, TSP, PM-10) HAVE AGGRAVATED PROBLEMS OF TOXIC EMISSIONS. FOR INSTANCE, THE RULES PHASING DOWN THE LEAD CONTENT IN GASOLINE RESULTED IN INCREASES IN OTHER INGREDIENTS, SUCH AS BENZENE, TO ACHIEVE THE SAME OCTANE PERFORMANCE LEVEL.

Strategies for controlling emissions from mobile sources

There is no single approach that can eliminate the pollution from the broad range of mobile sources. Rather, achieving significant reductions in VOC, NO₅x, CO, AND TOXIC EMISSIONS REQUIRES USING A HOST OF MEASURES, INCLUDING TIGHTER TAILPIPE STANDARDS, ENHANCED I/M PROGRAMS, INCREASING ANTI-TAMPERING MEASURES, CONTROLS ON FUEL VOLATILITY, ENCOURAGEMENT OF OXYGENATED FUELS, CONTROLS ON EVAPORATIVE EMISSIONS AND RUNNING LOSSES, AND CONTROLS OF NONROAD VEHICLES AND ENGINES.

In the long run, widespread use of clean-burning alternative fuels will be necessary to clean up the most polluted cities.

Included in H.R. 3030, as proposed by the President, was an innovative, new alternative fuels and fuel source program applicable to nine urban areas with the most serious ozone problems.

When this program was first proposed by the President many in industry expressed either opposition or grave concern about its scope and implications. Some were concerned that there was too much emphasis on methanol to the detriment of other fuels. Others were concerned about the mandates to sell vehicles and still others were concerned about the costs and problems related to establishing a new infrastructure.

The National Clean Air Coalition in a July 12, 1989 memorandum to all Members of Congress asked if there is not "a better way" of encouraging development of a clean war than "requiring use of alternative fuels." They said:

The second phase of the President's motor vehicle control program relies solely on "unproven 'alternative fuel' technologies (thatching, methanol, natural gas). Alternative fuel requirements will play a role. They are not a substitute for cleaner gasoline powered cars. Questions for fuel supply, handling, safety, costs, and overall environmental impact suggests that the more prudent approach would be to commit the Nation to a clean car without dictating the choice of control.

At that time, the Coalition indicated a support for a second round of tighter tailpipe standards in later 1990's rather than this alternative fuels program, although they did not close the door to such a program.

Later in January 1990, the Coalition restated their views as follows:

We support adding a program to require, beginning in the mid-90's, the production and sale in our worst polluted areas of a substantial number of vehicles whose total hydrocarbon pollution (exhaust, evaporative, and refueling) is significantly less than gasoline vehicles of the same model year. To produce the environmental benefits that our dirtiest cities need, both the performance standards and the required number of clean fuel vehicles should be designed to accomplish major additional pollution reductions.

In our view the reductions promised in the President's clean fuels proposal should serve as the minimum cleanup objective: reductions equal to those produced by requiring 30% of new car sales to meet standards for total ozone-forming hydrocarbons that are 80% cleaner than total emissions from gasoline cars. *** Clean fuel vehicles should also achieve comparable reductions in toxic emissions.

* * * * *

To work, an alternate fuel program must impose an obligation on automakers and fuel suppliers to produce and sell the clean fuels and vehicles in the required quantities. A program (such as the "Hall-Fields amendment" on the House side) that fails to do this is a sham.

Now, industry has argued against this, claiming it should not be held responsible for consumers' choices. [We] disagree. Who more than designers and suppliers of a product should take the responsibility for making and pricing it so that consumers will want to buy?

The fuel and auto companies are the ones who will make the engineering, design, marketing and pricing decisions for their products. These decisions will determine the attractiveness of the fuels and vehicles to consumers. If these companies are not held responsible for insuring sales then no one will be responsible. The result will be a program that will fail; paper compliance by industry, producing "example" vehicles that are not bought in significant numbers because the manufacturers have not tried to make the products desirable.

As reported, H.R. 3030 includes that program (along with the opportunity for a second round of tighter tailpipe standards) with expansions to give specific emphasis to governmental and private alternative fuel fleets. The Committee emphasizes that both as proposed by the President and as amended by the Committee, the new program aims to reduce the mobile source/fuels contribution to the VOC inventory in ozone nonattainment areas.

The Committee intends the clean fuel requirements to contribute toward attainment of the ozone air quality standard in these nine most serious nonattainment areas by reducing emissions of VOCs through the use of clean alternative fuels and clean fuel vehicles. The Committee recognizes that further tightening of traditional exhaust emissions standards alone is not like to result in significant further emissions reductions and that clean alternative fuels have the potential to achieve further reductions in VOC emissions to assist in attainment of the ozone standard.

The program complements the Sharp-Rockefeller Act of 1988 which provided fuel economy credits for manufacturers to encourage development and production of alternative fuels and other fuel source vehicles. Indications are that motor vehicle makers and the fuels industry are moving to accept this challenge. The bill provides that encouragement, while ensuring that no one fuel is given a preferred position or advantage.

The Committee wants to encourage a broad range of vehicles using electricity, improved gasoline, natural gas, alcohols, clean diesel fuel, propane, and other fuels. At the same time, the Committee recognizes the considerable hurdles and problems this program will face, including consumer acceptance. In addressing this issue in 1987 in regard to the Sharp/Rockefeller legislation, the Committee said:

The Committee believes the commercialization and widespread application and use in the United States of these proven technologies can be achieved by breaking out of a circular problem. The motor vehicle manufacturers will produce and commercially market alternative fuels vehicles on a large scale only when all performance and other problems of such vehicles are solved and they are satisfied that consumers will buy them; consumers will buy them only when they are satisfied that such vehicles perform as well as conventional fueled vehicles and are durable and when the fuel is readily available; fuel companies will only offer to make the alternative fuel available if there are new vehicles being manufactured in sufficient quantities throughout the Nation to create a demand for such fuel. This quandary is usually referred to as the "chicken and egg" problem.

This bill begins to solve the dilemma through a program that combines Federal purchase power, Federal financing for Mass Transportation, and the Federal Corporate Average Fuel Economy (CAFE) program in ways that should help to instill consumer confidence, gain valuable experience, encourage the development, production and sale of vehicles capable of operating on both conventional fuels (gasoline and diesel) and alternative fuels (alcohols and natural gas), and encourage the development of alternative fuel retail pumps for consumer use. In short, our objective is to help overcome economic and

other risks associated with the application of these fuels in order to provide widespread competition in the marketplace and thus improve energy security and air quality.

H.R. 3030 gives greater emphasis to the need for this program for air quality reasons. But, in the two short years since enactment of the Sharp/Rockefeller law the “chicken and the egg” problem is still formidable. Hopefully, this bill and that law together can provide the solutions. That is H.R. 3030's objective and goal.

It is important to emphasize that the bill looks at total vehicle emissions and seeks to set performance requirements aimed at reducing VOC emissions from whatever the source.

Such measures are incorporated into the provisions of Title II of the bill, as discussed below.

SECTION-BY-SECTION ANALYSIS

Section 201. Clean fuel requirements

This section establishes several programs for increasing the use of vehicles operated on “clean alternative fuels.”

Definitions.—Subsection (a) of section 201 amends section 216 to define the key terms used in the new section 212.

The term “clean alternative fuel” is defined as any fuel that can be used in a vehicle that complies with the standards applicable to clean-fuel vehicles when using such fuel. Natural gas, liquefied petroleum gas, alcohol fuels such as ethanol and methanol, reformulated gasoline, and hydrogen are specifically mentioned as fuels that should be considered clean alternative fuels, if they meet the applicable performance standards for VOCs and emissions reductions for air toxics to qualify under the program. Other power sources, like electricity are considered alternative fuel power sources as well. However, under the approach in the bill, reformulated diesel fuel meeting EPA standards, particularly diesel fuel with low sulfur and toughened particular standards for urban buses, which are important to many cities and their public transit authorities, or gasoline mixed with alcohols, would also be considered clean alternative fuels when they are used in vehicles that meet the performance standards and requirements for clean fuel vehicles when using such fuel.

It is not the Committee's intention to prejudge the emissions reduction potential of any fuel. It is intended that this be a fuel neutral program.

Although some believe that EPA has a strong preference for methanol, the Committee intends no such preference for that or any other fuel. All should compete.

The term “clean-fuel vehicle” is given a similar definition. A clean-fuel vehicle is defined as any vehicle that meets the performance standards for such vehicles in new section 212.

The term “ozone-forming volatile organic compounds” refers to all fuel related hydrocarbons emitted from a vehicle except methane. In determining the level of ozone-forming VOCs emitted from a vehicle, the Administrator is required to count exhaust, evaporative, refueling, and running loss emissions. Provision is also made for recognizing the reduction in refueling emissions as a result of Stage II or onboard controls or both. The Administrator should also adjust the level of such emissions to reflect the reactivity of the emissions. Vehicles with emissions that have less potential to form ozone than conventional gasoline vehicles should have their aggregate emission level discounted to reflect the lesser contribution to ozone formation.

Subsection (a) also defines the terms “covered fleet” and “covered fleet vehicle.”

A “covered fleet” is any fleet of ten or more vehicles under common ownership. To prevent fleet operators from avoiding clean-fuel requirements by spinning off subsidiary corporations (each operating fewer than ten vehicles), the bill provides that all motor vehicles (as defined in section 216 of the Clean air Act) owned by someone who is under the control of another person shall be considered to be owned by the controlling person.

A “covered fleet vehicle” is any vehicle in a covered fleet which is centrally fueled or maintained and capable of being centrally fueled and maintained. Because the definition of covered fleet vehicles applies to vehicles that are capable of being centrally fueled and maintained, a fleet operator cannot avoid clean fuel requirements by the simple expedient of dispersing refueling or maintenance operations. The EPA Administrator, in determining if a fleet is subject to the covered fleet vehicle definition, will take into account the vehicle range of the fleet vehicles, their operational requirements, specialty uses, costs, safety, and other relevant factors.

Vehicles leased or rented to the public, vehicles held by dealers for sale, including demonstration vehicles, emergency and law enforcement vehicles (i.e., ambulances, fire engines, and police vehicles) and motor vehicle manufacturer's product evaluations or test vehicles are not included in the definition of covered fleets and hence are excluded from clean fuel requirements.

When the bill was reported, we were aware of fleet operators concerns, such as expressed to us by one fleet operator which acquires vehicles for fleets. That firm said that most of their clients' vehicles are used by sales/service representatives “who do not come to their company's office on a regularly scheduled basis and certainly not on a daily basis.” They are concerned about uncertainty and about the possibility that many fleet operators might “conclude that they will terminate their employer provided car program” if, for example, there were provisions that contributed to that uncertainty. They added:

Under such a circumstance, the alternative of employer-provided cars under a reimbursement program becomes viable due to the potential costs and impossible demands of a central fueling requirement.

We believe that uncertainty has been removed and that the program will meet the reasonable and legitimate concerns of the fleets.

New section 212.—Subsections (b) of section 201 deletes existing section 212 and inserts a new section 212, establishing several new clean-fuel programs.

This section replaces the former section 212, which had established a low-emission vehicle board to promote the development of low-emission vehicles. The board was abolished in 1980 by Public Law 96-208, 94 Stat. 98.

Urban buses.—New subsection 212(a) requires the Administrator to issue regulations that establish a clean-fuel program for urban buses and requires such buses to operate on such fuels. These are intra-city type buses, i.e., the public transit buses of Miami, New York, Boston, Chicago, San Francisco, and other urban areas. They are not the inter-state or inter-city buses that crisscross our States and Nation.

This program must require that new urban buses operated primarily in metropolitan areas having a 1980 population of over 750,000 be clean-fuel vehicles capable of operating, and exclusively operated, on clean alternative fuel. The program also requires regulations for other than new urban buses in the areas subject to the program that have their engines replaced or rebuilt meet the same requirements, taking into consideration costs, energy safety, and other factors, such as the age of the buses.

The Committee notes that according to the Department of Transportation (DOT) in an April 13, 1990 letter to the Committee, there is little information on retrofitting. DOT said:

We are unable at this time to provide any meaningful data on the cost and practicality of retrofitting existing vehicles to methanol. Indeed, one of the goals of the AFI program is to obtain such information. The age and condition of the individual

vehicle to be converted, and the amount of work required to retrofit to methanol, are the major factors in determining cost and practicality. At this time, it appears that a retrofit of an existing engine to methanol is not a practical approach. The additional components required (e.g., new injectors, glow plugs, fuel cooling system, modifications to the bypass engine blower, and the replacement of the existing fuel tank) are sufficiently complex to warrant the replacement of the entire engine system with a new methanol engine instead.

Nationally, the average fleet age of transit buses is eight years. Over 3,000 new buses are purchased each year. UMTA regulations established the minimum useful life of a transit bus to be 12 years before replacement. Age is by far the most common factor in the replacement of a transit bus; however, it may be practical for some buses to remain in service for a longer period of time, if it is determined that repairs would be more cost-effective than replacement.

The Administrator is to phase-in the requirements of the subsection applicable to the purchase of new urban buses over the 1992 through 1995 model years for buses, which generally begins after December 15 each year. The requirements for rebuilt buses will take effect after January 1, 1995. If the Administrator finds that delaying the program would substantially increase its benefits or decrease its costs, the requirements may be postponed for up to two years.

Under the phase-in, 100 percent of the buses purchased and placed into service must be clean fueled after January 1, 1995. After that same date, at least 30 percent of the purchases in all of the applicable areas in each model year shall be clean fuel vehicles that exclusively use either natural gas, ethanol, or methanol or any another clean alternative fuel with comparable emissions.

The Committee wants to encourage the development and use of CNG, ethanol, methanol, and electric powered vehicles. We understand that new methanol and CNG buses are being developed and demonstrated regarding reliability, performance, etc. Unfortunately, some manufacturers have told the Committee in recent correspondence that they are not ready, as yet, for full scale production.

For example, Cummins Engine Co., Inc., in a February 16, 1990 letter to Subcommittee Chairman Sharp said:

Cummins has been actively developing compressed natural gas (CNG) and exhaust aftertreatment (diesel) versions of our L-10 transit bus engine in order to meet EPA's existing and Congress' 1991 urban bus emission regulations; however, neither of these technologies is demonstrating the reliability or durability necessary for full production release. It is our expectation that engines will be developed that meet both Cummins' and industry's standards for reliability/durability. However, this will require additional time.

For these reasons, Cummins supports the APTA position which would align the 1991 urban bus emissions regulations with the 1991 heavy-duty truck emission regulations and would provide for a phase-in of alternately fueled engines.

In a June 19, 1989 letter to EPA, the Donaldson Company, Inc. said:

In light of our program success to date, we intend to make available for sale, a Donaldson developed and manufactured particulate trap system which will allow new 1991 model year heavy-duty diesel bus engines meet the .1 gm/BHP-hr particulate standard. Our position is based on the following assumption:

The particulate emission standard of .1 gm/BHP-hr for urban buses is maintained for 1991.

Alternative fuels, such as methanol or compressed natural gas (CNG), are not mandated for new urban buses starting in 1991.

Engine-out emissions of heavy duty diesel bus engines for 1991 will meet 5.0 gm/BHP-hr NO₅x AND .25 GM/BHP-HR PARTICULATE.

Modifications to the current allowable maintenance regulations are permissible.

In conclusion, Donaldson believes that traps are a viable and economically feasible technology option which will enable the use of diesel fueled engines to meet the 1991 bus particulate standard of .1 gm/BHP-hr. Under the assumptions previously identified, including modified allowable maintenance regulations, Donaldson intends to make available trap systems for new diesel powered urban buses for 1991. We believe that trap equipped diesel powered buses will be an attractive, economical alternative for those transit authorities which have expressed a strong interest in continuing to operate diesel powered buses.

The Committee observes that in February 1989 the American Public Transit Association (APTA) petitioned, for technological reasons, EPA to defer the 1991 urban bus particulate standard to model year (MY) 1994 to coincide with the same standard for heavy-trucks applicable in that year. During this period, the standard would be 0.25 grams per brake horsepower-hour.

EPA has not acted on the petition. Instead, the President's bill included the deferral and the interim standards. In a letter dated December 20, 1989, to the Committee, EPA said the agency could not "quickly respond particularly to the APTA petition and, in any event, Congress is likely to establish a statutory bus emission standard in Clean Air Act amendments."

The bill carries out the Administration's recommendations. For particulates, the standards may not exceed 0.25 grams per brake horsepower-hour (g/bhp-hr) through MY 1993 and 0.10 g/bhp/hr thereafter. The Administrator must revise the standard for particulates for diesel-fueled buses (regardless of whether the buses are subject to the clean-fuel program or not) within 180 days. The Administrator may promulgate a more stringent standard.

Clean-fuel vehicles.—Section 212(b), unlike the President's bill, establishes specific emission standards applicable to clean-fuel vehicles. In addition to the specific standards set out in subsection, all clean-fuel vehicles must meet the applicable emission standards under section 202 for CO, NO₅x AND PARTICULATES. THESE ARE THE STANDARDS THAT APPLY TO CONVENTIONAL VEHICLES OF THE SAME TYPE AND MODEL YEAR.

Under the general vehicle requirements, in the case of passenger cars (and light-duty truck weighing less than 3,750 lbs loaded vehicle weight), the subsection establishes two phases of standards. The phase I standards, which apply for MY 1995 through 1999, require that ozone-forming VOC emissions not exceed 0.86 grams per mile (gpm).

The 0.86 gpm level is a total vehicle nonmethane hydrocarbon vehicle (Exhaust + Evaporative + Running losses + Refueling Emissions). As the Committee bill states, achieving this level with 100 percent of such vehicle sales in the 9-applicable ozone areas in a model year achieves the same reductions as a 30 percent reduction from a 0.95 gpm car in only 30 percent of the vehicles which was the reduction proposed by the President.

The Committee again stresses that all such vehicles sold in the nine areas must be alternative fueled vehicles. As noted, this approach was taken, at the suggestion of the Administration, to avoid problems identified by the Committee with proposals to mandate sales. On a per vehicle basis, it is approximately a 10 percent reduction compared to the emissions of conventional passenger cars and light-duty trucks for the same model years. The bill also requires reductions in VOC emissions that are expected to reduce by 12 percent incidences of cancer from the emissions of five toxic substances (benzene, 1,3-butadiene, gasoline vapors, polycyclic organic matter, including diesel particulates, and formaldehyde) from conventional gasoline fueled vehicles. This provision should not require more vehicle-based control technologies than otherwise necessary to comply with VOC standards.

The phase II standards, which are applicable in MY 2000 and after, limit ozone-forming VOC emissions to 0.72 gpm and require a 24 percent reduction in cancer incidence, unless such reduction is not technologically feasible. The ozone-forming VOC standard represents approximately a 25 percent reduction from a 1995 conventional vehicle.

The bill also requires EPA to set standards applicable for light-duty trucks weighing more than 3,750 lbs loaded vehicle weight (lvw), but less than 8,500 lbs gross vehicle weight rating (gvwr). It authorizes EPA to set standards for heavy-duty trucks weighing more than 8,500 lbs gvwr. The Committee points out that the President's bill did not extend to heavy-duty vehicles the clean fuels program and, of course, did not recommend standards for them. The standards for the heavy-duty trucks, if set, should be no more stringent than the standards for passenger cars and light-duty trucks.

The Committee notes that control of truck emissions is relatively more difficult than control of light-duty vehicle emissions, due in part to differences between truck and car powertrain designs and their operating conditions and uses. Historically, consideration of such factors has resulted in heavy-duty numerical standards that are about 40 percent less stringent than comparable car standards.

The Administrator is directed in subsection (b)(5) to establish rules for determining the compliance of clean-fuel vehicles with the emission standards promulgated under the subsection. The Administrator may only exclude vehicles that have been "detectably" abused, tampered with, or improperly maintained in a manner that would likely affect emission performance when determining in-use compliance.

Section 212(b)(5) describes the means by which EPA shall determine compliance with the requirements of the clean fuels program. The terms of section 212(b)(5) require manufacturers to maintain conformity with the applicable standards under all in-use condition except when vehicles have been tampered, abused or not maintained in conformity with maintenance instructions approved by EPA prior to new-vehicle certification under section 206. It also provides the conditions under which EPA is to require manufacturers to recall and remedy vehicles determined not to meet such requirements. This paragraph provides that EPA may require a manufacturer to remedy nonconforming engines or vehicles "pursuant to section 207(c)" which is mandatory. This provision specifies two circumstances, for purposes of the clean fuels program, under which there is recall of vehicles pursuant to section 207(c) of the Act. Under this section 297(c) provision, a manufacturer must recall and remedy vehicles whenever EPA determines that a substantial number of such vehicles, although properly maintained and used, do not meet the applicable standards throughout their useful life. The bill adds a second EPA determination under which recalls would occur in the clean fuels program. This would be whenever the average emissions level of a tested sample of such vehicles fail to meet such requirements.

These compliance provision differ from those applicable to traditional tailpipe standards in two respects: first, any tampering or improper maintenance and use can exclude a vehicle from recall testing for tailpipe standards compliance and second, because of the potential for a single excessive emitting vehicle to result in a test sample with average emissions above the standard, this is not a basis for recall under the tailpipe standards provisions. The Committee recognizes that these provisions are new and that other proposals have been suggested. Unfortunately, the impact and basis for them are uncertain because some of the data establishing all of the details of EPA's 0.95 gpm baseline vehicle have not yet been made public. The adjustments for tampering, which should not be a significant component of the 0.95 gpm vehicle, are not clear. This is an area where the Committee hopes EPA will soon provide the needed data for evaluation.

In the case of dual-fueled vehicles, the vehicle must meet the applicable standards for which the vehicles were certified. However, compliance with one fuel shall be determined only after removing as much of the other fuel as is practical.

A special rule applies for determining the level of VOC emissions. The Administrator may not test vehicles with more than 62,000 miles of in-use operation. In addition, in-use compliance must be based on the mean level of emissions. These provisions reflect the basis upon which the feasibility of the clean fuels standards program was determined by EPA in proposing H.R. 3030.

Subsection (b)(5) also provides that manufacturers may demonstrate compliance with emission standards in the subsection by certifying that the vehicles meet the standards applicable under section 202 and specifying that they be operated on reformulated gasoline that complies with the requirements of this section as specified by EPA.

Subsection (b)(6) clarifies that, like present law regarding tailpipe emissions, nothing in this section shall be construed to authorize or require the Administrator to mandate the production or sale of clean-fuel vehicles or involve EPA in such competitive matters as prices, marketing strategies, or the specification of models, lines, or types of vehicles. It also includes a similar disclaimer applicable to fuels. These are management functions and relate to highly competitive matters within these industries.

Finally, subsection (b)(7) directs the Administrator to issue credits to manufacturers that produce vehicles that are cleaner than required under the subsection.

Availability of clean fuels.—Subsection (c) requires the Administrator to provide for the availability of clean alternative fuels in the areas in which clean-fuel vehicles are to be sold. The Administrator is to determine the clean alternative fuels to be made available based on automakers' projections of clean-fuel vehicle sales and consultations with affected State and local governments and others. At a minimum, one clean alternative fuel must be offered for sale at service stations dispensing more than 50,000 gallons per month of motor vehicle fuel. Service stations that recently replaced underground storage tanks are granted a seven-year grace period, measured from the replacement of the old tank. In addition, the Administrator is required to grant transferable credits for exceeding applicable requirements.

The Administrator is required to establish specifications for clean alternative fuels to reduce or eliminate any unreasonable risk such fuels may pose to public health, welfare and safety, or to ensure adequate vehicle performance and maintenance. One set of specifications must define a reformulated gasoline that when used in a conventional vehicle results in compliance with the emission standards for clean-fuel vehicles.

The clean-fuel vehicle program.—Subsection (d) provides that all new passenger cars and all light-duty trucks weighing up to 3,750 lbs gvwr sold in ozone nonattainment areas with a 1988 design value of 0.18 and above (and a population of 250,000 or more) must meet the standards for clean-fuel vehicles. This requirement becomes effective in MY 1995.

Serious ozone nonattainment areas may opt into the clean-fuel vehicle program, provided the Administrator approves their request as appropriate.

The President's bill as already noted mandated that, in effect, the auto and truck manufacturers and dealers produce and sell these clean fuel vehicles in the numbers specified each applicable model year through the year 2004. The bill, of course, did not mandate that the consumer buy these vehicles. Also, it was not recognized at that time that under law, custom, and contract, manufacturers do not sell vehicles at retail. They sell the vehicles to the dealers who offer them for sale to the public. Thus, dealers feared that the mandate was on them and that they could be "stuck" with an overload of unsold vehicles on their lots. They feared that consumers would not embrace these vehicles openly and enthusiastically, particularly in the early years of the program.

To overcome this problem, the Administration recently suggested in discussions with the Committee, the "100 percent" sales approach for the nine worse ozone areas. Under the bill, all vehicles sold in the Houston, Milwaukee, Chicago, Los Angeles and the other worse nonattainment areas must be clean-fuel vehicles in the applicable model years. The consumer has no choice and the air is cleaner. It solves the mandates problem. The Administration deserves great credit for the suggestion.

As introduced, the bill established the program through the year 2004 at 1 million vehicles. The Committee bill has no such limit. It is permanent.

In carrying this subsection and all of section 212, the bill requires public hearings to consider a whole range of factors in the promulgation of all regulations. There is to be at least one hearing for each regulation and they might be held outside of the Washington, D.C. area.

Program delays.—Subsection (e) provides that the Administrator must delay the clean-fuel vehicle program by up to two years if the Administrator determines that the delay will lower costs or improve benefits.

Fleet vehicle program.—Subsection (f) establishes a clean-fuel program for fleet vehicles. It is aimed at encouraging the use of new power sources, like electricity, and non-traditional fuels, such as compressed natural gas, methanol, propane, and ethanol. As noted before, it was not a part of the President's program. It is an added air quality improvement program.

The Subsection establishes special emission standards for clean-fuel fleet vehicles. In the case of passenger cars and light-duty trucks weighing up to 3,750 lbs gvwr, the vehicles must meet the standards applicable under subsection (b). In addition, in phase I, which lasts from MY 1995 through MY 1999, total ozone-forming VOC emissions from such vehicles cannot exceed 0.66 gpm and, in phase II, which starts with MY 2000, total ozone-forming VOC emissions cannot exceed 0.25 gpm. The Administrator is required to set additional standards for toxic emissions for phase II, reflecting the level of emission reduction achievable with clean fuels and vehicles that comply with the VOC standard.

The Committee understands that the phase I standard of 0.66 gpm could be met by a flexible fuel vehicle designed to be capable of operating on an 85 percent methanol or 85 percent ethanol mixture, and that phase II VOC standard of 0.25 gpm will require, in the case of natural gas, vehicles that are dedicated CNG vehicles or dual fueled vehicles (i.e., CNG and gasoline). This is clearly more prescriptive than the introduced version of H.R. 3030.

The phasing here and in the general program is consistent with the President's approach, although his proposal did not set a specific year for the second phase. The Committee selected these years to allow for the development of technology and, most importantly, consumer acceptance. Some have urged earlier action. The Committee believes this phasing over a decade is sound to ensure a workable, economically sound, and consumer acceptable program. The Committee expects EPA, the vehicle makers, the fuel providers, and others to work together to make this total program work fairly and effectively.

Subsection (f)(1)(C) provides that the Administrator may adjust by rule, in response to a petition by an auto maker or fuel provider (but is not required to do so), the 0.25 gpm phase II standard for passenger cars and light-duty trucks to not greater than 0.53 gpm if the Administrator determines that such adjustment is "appropriate," giving consideration to the need to attain the ozone NAAQS in the nine areas and the technical and economic feasibility of achieving the more stringent 0.25 gpm standard taking into account various factors like safety. EPA may determine to adjust the Phase II standard for a particular class of vehicle or covered area. The Committee realizes that the 0.25 gpm standard will not be required for about nine model years or calendar year 1999. However, according to manufacturers in the vehicle business, that is not a very long time given the period usually required to develop, engineer, certify, and produce new models. This provides a safeguard.

The Administrator is authorized to waive the NO_x standard that would otherwise be applicable during phase II and establish a different standard to enable compliance with the 0.25 gpm level, but not a higher level. However, for passenger cars and light-duty trucks the waiver level is limited to 0.7 gpm.

Subsection (f)(1)(D) requires the Administrator to set emission standards for clean-fuel fleet light-duty trucks of 8500 lbs gvwr or less and a loaded vehicle weight of more than 3,750 lbs gvwr but less than 5,750 lbs gvwr and authorizes the Administrator to set emission standards for heavier vehicles. Such standards must be comparable in stringency to the standards applicable to passenger cars and light-duty trucks as discussed earlier in this report.

Subsection (f)(2) requires States with ozone nonattainment areas subject to the clean-fuel vehicle program described in subsection (d) to submit revisions of their SIP to implement a clean-fuel program for fleet vehicles. The State plan must require

increasing percentages of new passenger cars to meet the clean-fuel standards for fleet vehicles. (The percentages for fleet vehicles meeting phase I standards are 30 percent in MY 1995 and 1996, 50 percent in MY 1997, and 70 percent in MY 1998 and after. A similar phase-in applies for phase II standards.) The State plan must also require that fuel providers make clean fuels available to fleet operators.

The requirements of the subsection also apply to urban areas located at an elevation greater than 4,000 feet above sea level and having a 1980 population of 300,000 or more. This provision will help reduce CO emissions from mobile sources in cities such as Denver and Albuquerque. EPA can by rule increase the percentage for MY 2000.

Provision is made to extend by rule this program within one year after enactment to other serious ozone areas of comparable size and population if needed for attainment of the NAAQS. The objective should be for EPA to cover larger urban areas, where there are large numbers of fleets that should make an air quality difference not small areas like Portland, Maine, or Sheboygan, Wisconsin where fleets may be less significant.

Subsection (f) also contains provisions that provide exemptions from the fleet requirements. The State may submit an implementation plan that lowers the percentage of light-duty fleet vehicles subject to the program if the State finds that the program requirements cannot be feasibly achieved or would create an undue economic hardship. In addition, fleet operators are provided an exemption opportunity from the requirements of the program if suitable fleet vehicles or clean fuels are not actually available.

Subsection (f)(4) requires the States to issue credits to fleet operators that exceed their requirements under the subsection. The Subsection does not try to dictate to the fleets about vehicle or fuel choices. They must freely choose on their own from the available options provided by the vehicle makers and fuel providers.

The bill also recognizes that there are many types of fleets. Some are large, regional utility fleets (like electric companies); some are large, national delivery services (like United Parcel Service or Federal Express); some are national repair and maintenance firms (like Sears and Roebuck, and Co. or General Electric). Many other fleets, however, are not so large (like local contractors, plumbers, electricians, diaper services, lawn services, and many others). Recognizing this and their needs for vehicles of various types, the bill provides for EPA issuing rules within 18 months after enactment setting standards to determine the availability of clean-fuel fleet vehicles. EPA must consider various factors which may create undue economic hardship for various fleets. The rule will include procedures for granting, upon proper showing, exemptions on an annual basis where the vehicles or fuels are not truly available.

The provision is designed to provide reasonable safeguards against creating possible economic hardships, particularly in the case of smaller, local fleets that could work against public acceptance and workability of the program. The Committee believes that the success of the entire, now clean-fuels/vehicles program, not just the fleet aspects, will depend on ensuring that problems, such as these, are resolved and worked out with a minimum of discomfort. The Committee wants to see the fleet program be successful.

Credits must also be issued to persons other than operators of covered fleets who operate vehicles that meet the standard for clean-fuel fleet vehicles.

Subsection (f)(5) provides protection from various transportation control measures for clean-fuel fleet vehicles. TCMs that restrict vehicle usage do not apply to clean-fuel fleet vehicles. In addition, States may not apply requirements regarding high-occupancy vehicles or trip-reduction ordinances to clean-fuel fleet vehicles. However, these protections will not apply if the State demonstrates to EPA's satisfaction that the emissions resulting from the traffic congestion caused by clean-fuel fleet vehicles exceeds the emission reductions achieved by the clean-fuel fleet program.

H.R. 3030 provides that “aggressive” program, not only for fleets, but for all vehicles, without “tilting” toward any one fuel. It provides the opportunity Mr. Farman wants for all clean fuels “to compete on an equal basis in the market-place” and it is intended to ensure, as he urges, that “no fuel should qualify as a clean fuel that does not meaningfully improve air quality.”

Oxygenated fuels.—Subsection (g) established a program for the use of oxygenated fuels.

States with CO nonattainment areas that are classified as moderate and which have a design value of 12.7 or greater at the time of classification are required to submit a revision to their implementation plan that includes an oxygenated fuel program. The plan revision is due one year after classification. It must require that gasoline sold in the area during the period of high CO pollution contain an oxygen content of at least 2.0 percent.

The oxygenated fuel requirement in moderate areas can be waived by the Administrator in one of three situations. First, it can be waived if use of oxygenated fuels would prevent or interfere with attainment of a Federal, State, or local standard for another air pollutant. Second, it can be waived where motor vehicles do not contribute significantly to CO levels in the area. And third, it can be waived if the State demonstrates that use of oxygenated fuels is not necessary for attainment and that the State will achieve equivalent CO emission reductions by an alternative means that is more cost effective. Such alternative means must not be required by other provisions of this Act.

Serious CO areas must establish a similar oxygenated fuel program, except that in serious areas the minimum oxygen content of the fuel is raised to 2.7 percent.

The Administrator is required under the subsection to promulgate guidelines establishing a market-based program under which the use of fuels with a higher oxygen content than required can offset the sale or use of fuels with an oxygen content below the minimum levels established in the subsection. States subject to oxygenated fuel requirements of this subsection have the option of incorporating the trading program into their implementation plans.

Federal Government fleets.—Subsection (h) establishes a fleet program for vehicles operated by Federal agencies.

The subsection applies to each Federal agency that operates any passenger cars or light-duty trucks primarily within an ozone nonattainment area classified as serious, severe, or extreme. Such agencies must purchase vehicles meeting the standards for clean-fuel fleet vehicles under subsection (f) when acquiring new passenger cars and light-duty trucks. The agencies must purchase the maximum number of such vehicles possible. At a minimum, however, the agencies must purchase clean-fuel fleet vehicles according to the following schedule: 30 percent of such new vehicles after September 30, 1985; 50 percent after September 30, 1986; and 70 percent after September 30, 1988. The light-duty trucks subject to the subsection include any light-duty trucks with a gross vehicle weight of 8,500 lbs gvwr or less, as defined by EPA regulations.

The vehicles subject to clean-fuel requirements must be exclusively operated on clean alternative fuels, except where such operation is impracticable.

Subsection (h) requires Federal agencies to purchase clean fuel vehicles when replacing vehicles in current fleets. Federal agencies commonly purchase vehicles for official government use. The Committee understands that there are, however, specific Federal needs for which vehicles are obtained for short-term use. Principal among these is seasonal use. Agencies such as the Job Corps, the National Forest Service, the National Park Service and the Postal Service will lease vehicles for up to 120 days to meet peak seasonal demands. After these requirements are over, the vehicles are returned to the lessor.

For infrequent travel, Federal employees sometimes use their own vehicles and subsequently are reimbursed for their travel expenses. Furthermore, Federal employees often travel by air and rent a vehicle at their destination. Rental cars and so-called “private owner vehicles” (POVs) technically are “placed into service” by Federal agencies. The Federal Government, however, neither owns the vehicles nor is it responsible for their maintenance.

The Committee does not intend to require privately-owned vehicles and vehicles leased for less than 120 days to conform to the same standards as vehicles owned or leased by the Federal Government.

The bill requires “each Federal agency” to utilize clean fuel vehicles. The Committee intends for the phrase “each Federal agency” to be construed broadly to include any agency, department or instrumentality of the United States. The amendment applies such instrumentalities as the Postal Service, the Tennessee Valley Authority, and the Western Area and Bonneville Power Administrations, and require them to purchase clean-fuel fleet vehicles. Finally, the Committee believes the phrase “Federal agency” includes agents under cost reimbursable contracts which normally provide for the use of Federal vehicles.

Subsection (h) authorizes appropriations to carry out the Federal fleet program. Funds appropriated pursuant to this paragraph are to be available until expended. The Committee intends for the Secretary of the Treasury to deposit any money appropriated for the agency designated by the President, probably the General Services Administration (GSA), into the General Supply Fund established pursuant to Section 109 of the Federal Property and Administrative Services Act of 1949, as amended. The General Supply Fund (GSF) is a revolving fund which finances, on a reimbursable basis, a national supply distribution system, a system of ordering supplies for direct delivery from the GSA to other Federal agencies, and a system of interagency motor vehicle support (the Interagency Fleet Management System). Reimbursements are made directly into the GSF, and funds are available from the GSF without fiscal year limitation. The costs of GSA clean fuel program will be paid by direct appropriations. These funds will augment the present funding mechanism, and should be incorporated into the fund.

Subsection (h) sets forth the requirement that the President issue regulations providing for the availability of clean alternative fuels. To the maximum extent practicable, Federal agencies are to use commercial fueling facilities in their primary operating areas. Presumably, agencies should establish Government fueling facilities in areas where clean alternative fuels are not readily available from commercial facilities. The provision also directs those agencies to issue regulations requiring vehicle operators to use clean alternative fuel whenever the fuel is available. Otherwise, dual fuel vehicles obtained by Federal agencies to meet the requirements of subsection (h) may operate on conventional fuels when necessary.

Subsection (h) requires Federal agencies to prioritize the use of appropriated funds when implementing the clean alternative fuel program. The bill requires Federal agencies to operate clean fuel vehicles in areas with the most severe pollution problems. The bill also directs Federal agencies to choose fuels which yield the greatest reduction in pollutants per dollar spent.

The bill limits the authority of Federal agencies to spend appropriations authorized under subsection (h) to pay for the clean fuel program. Paragraph (A) of subsection (h)(5) ensures that appropriations only pay the incremental costs of the program. The bill allows Federal agencies to use appropriations to offset possible losses, if any, in revenue from the sale of used government vehicles. An indirect cost of the program is the loss of revenue received from the sale of used government vehicles. Sale revenue now provides a significant portion of the capital funding used to purchase replacement vehicles. If used clean fuel vehicles sell for less than comparable conventional fueled vehicles, the loss of revenue will reduce the amount of money available for replacement vehicles, and appropriations may be necessary to provide for the shortfall.

Subsection (h) declares that the incremental cost of clean vehicles over conventional fueled vehicles will not be considered when applying the limits contained in Public Law 101-136 or in any subsequent legislation on the amount Federal agencies can pay for vehicles. Section 601 of the Treasury, Postal Service and General Government Appropriations Act for Fiscal Year (FY) 1990 (P.L. 101-136) establishes an expenditure limitation of \$7,100 per passenger vehicle. This figure represents a \$500 increase in the limitation over the previous year.

Subsection (h) assumes that certain classes of vehicles are critical to the health and safety and national security function of Federal agencies. These vehicles are exempted from the requirements of the Clean Alternative Fuel Program.

The major purpose of the Federal fleet program is to encourage automobile manufacturers to produce clean fuel vehicles for the commercial marketplace. Therefore, the Committee's strong preference is for Federal agencies to obtain clean fuel vehicles from original equipment manufacturers. Nevertheless, subsection (i) of the Committee amendment allows Federal agencies to purchase retrofit conventional fuel vehicles in order to meet the requirements of the clean fuel program. This provision provides an alternative source of supply for Federal fleet managers.

To be eligible for consideration, converted vehicles must meet regulatory requirements promulgated by the Administrator. Nothing in this subsection, however, is intended to limit the authority of the President's designee to require that warranty, maintenance and other services provided by original equipment manufacturers also will be available even if the vehicles are converted to clean fuel vehicles due to the unavailability of original equipment which meets the emission requirements of this amendment. Regulations promulgated by such designees under Federal procurement laws would be in addition to those promulgated by the Administrator of the EPA under section 207 of the Clean Air Act relating to warranties for compliance with emissions standards.

Finally, the subsection establishes a demonstration program for "superclean" vehicles. For the years 1995 through 1999, 10 percent of the new vehicles subject to the subsection must be designed to meet an emission standards of 0.19 gpm for VOCs.

Vehicle conversions.—Subsection (i) provides that all of the requirements of section 212 could be met through conversions, but it does not mandate such conversions. The Committee notes that fleet operators are quite concerned about any such mandate. It establishes standards for vehicle conversions. It provides that converted vehicles shall be subject to certification, warranty, and recall provisions, with the vehicle converter being considered a manufacturer for these purposes and related enforcement purposes.

Tank and fuel system safety.—Subsection (j) directs the Secretary of Transportation to promulgate regulations to insure the safety of fuel tanks and systems.

Information collection.—Subsection (k) provides additional information collection authorities to the Administrator. The Administrator may use the authorities for enforcement purposes.

California vehicle program.—Subsection (l) provides that California may establish a separate and more stringent clean alternative fuels program than those established under this section for ozone nonattainment areas within the State. This waiver of preemption is in addition to (and not in any way a limitation upon) the waiver of preemption available to California under section 209 for traditional tailpipe emissions control programs applicable to gasoline and diesel fuel vehicles.

Reductions in refueling emissions.—Subsection (m) provides that any reductions in refueling emissions from stage II controls shall be considered in determining whether a vehicle complies with emission standards under the section.

Reformulated gasoline.—Subsection (n) requires the Administrator to establish, after hearings, specifications for cleaner gasoline to be used in conventional fueled vehicles. Such cleaner gasoline must achieve the greatest reduction in ozone-forming VOC and air toxic emissions achievable through reformulation of conventional gasoline, taking into consideration the cost of achieving such emission reductions and health, environmental and energy impacts. These can be different requirements for leaded and unleaded gasoline vehicles. Beginning January 1, 1995, the Administrator must require that gasoline meeting the specifications be offered for sale in all ozone nonattainment areas with a 1988 design value above 0.18.

Consultation.—Subsection (o) requires the Administrator to consult with the Secretaries of the Departments of Energy and Transportation in carrying out section 212.

Test procedures.—The Committee recognizes that the feasibility of the standards prescribed under section 202 and new section 212 has been established on the basis of currently effective test procedures at the time of final passage from Committee.

Accordingly, it is the Committee's intent that if EPA subsequently revises such procedures under the title, the measured emissions results under such revised procedures shall be adjusted as necessary to reflect the results that would be achieved under current procedures.

Section 202. Emissions of hydrocarbons, carbon monoxide, and oxides of nitrogen from passenger cars

Motor vehicle emission standards.—Section 202 of the Clean Air Act Amendments of 1990 amends Clean Air Act section 202 to establish new motor vehicle emission standards. These standards are more stringent than those proposed in the bill as introduced. They essentially adopt the so-called “California” standards.

NMHC and CO.—New Clean Air Act section 202(g) establishes new emission standards for nonmethane hydrocarbons and CO applicable to passenger cars and all light-duty trucks of 6000 gvwr or less with a loaded vehicle weight of less than 5750 lbs or less produced in MY 1994 and thereafter. Forty percent of each automaker's 1994 model year passenger cars and light-duty trucks, eighty percent of each automaker's 1995 model year passenger cars and light-duty trucks, and 100 percent of each automaker's passenger cars and light-duty trucks thereafter are required to comply with emission standards provided in Table I of section 202. Current standards for total HC (which provide a cap on total HC methane emissions) and CO remain in place in addition to the new standards.

The section includes two sets of standards. A set of more stringent standards is provided for which the useful life of the emission controls for purposes of certification is to be five years or 50,000 miles, whichever first occurs. These emission standards include standards for all passenger cars, and all light-duty trucks weighing 3750 pounds loaded vehicle weight or less, of 0.25 grams per mile for nonmethane hydrocarbons and 3.4 grams per mile for CO. Slightly numerically higher standards are applicable for which the useful life of the emission controls for purposes of certification is to be 10 years or 100,000 miles, whichever first occurs. These emission standards include standards for all passenger cars, and all light-duty trucks weighing 3750 pounds loaded vehicle weight or less, of 0.31 grams per mile for nonmethane hydrocarbons and 4.2 grams per miles for CO.

NO₅x and PM.—New Clean Air Act section 202(h) establishes emission standards for NO₅x and particulate matter applicable to passenger cars produced in MY 1994 and thereafter, and applicable to light-duty trucks of 6000 lbs gvwr or less with a loaded vehicle weight of 5750 lbs lvw or less produced in MY 1995 and thereafter. Forty percent of each automaker's 1994 model year passenger cars and 100 percent of each automaker's passenger cars in subsequent years are required to comply with standards specified in Table 2 of section 202. In the case of light-duty trucks, the specified percentage is to be 40 percent in MY 1995 and 100 percent thereafter. For all passenger cars and all trucks weighing 3750 lbs loaded vehicle weight or less, Table 2 specifies a standard of 0.4 grams per miles for nitrogen oxides, and .08 grams per mile for particulate matter. For light trucks of 6000 lbs gvwr or less with a loaded vehicle weight of 375 pounds to 5750 pounds loaded vehicle weight the particulate matter standard is the same, but the nitrogen oxides standard is 1.0 grams per mile.

Tier II standards.—Table 3 provides a second phase of more stringent standards and useful life period which are to take effect with respect to model years beginning after January 1, 2003 unless the Administrator determines, on the basis of a study, procedures, and criteria provided for in subsection 202(i), that such standards should not take effect at that time or that they should be postponed, or that alternative standards are established.

New Clean Air Act section 202(i)(1) directs the Administrator, with the participation of the OTA, to study whether to establish for MY 2003 and later the standards and useful life periods on a nation-wide basis for all passenger cars and all trucks weighing less than 3,750 pounds loaded vehicle weight specified in Table 3 of section 202. These standards include a nonmethane hydrocarbon standard of 0.125 grams per mile, a NO₅x standard of 0.2 grams per mile, and a CO standard of 1.7 grams per mile. The useful life period accompanying these standards for purposes of section 202(d) is to be 10 years or 100,000 miles, whichever first occurs. The study is to also consider more or less stringent standards and useful life periods that those set forth in Table 3, but no less stringent than provided for in subsections 202 (g) and (h).

The study under paragraph (1) is to consider the need for further reductions in emissions in order to attain and maintain the NAAQS, taking into consideration the waiver provisions of section 209(b) which allows California to adopt more stringent tailpipe standards. The study should also consider the contribution to air pollution in California of out-of-state cars registered or permanently residing in the State, which were not amenable to tailpipe control by California under the section 209(b) waiver. It should also evaluate the contribution of vehicles that are only in the State temporarily. The study is also to examine: (i) the availability of pollution control technology for model years not earlier than 2003 and not later than 2006, including the lead time and safety and energy impacts of meeting more stringent standards; and (ii) the cost-effectiveness of obtaining emission reductions from cars and light-duty trucks taking into consideration alternative means of attaining and maintaining air quality standards pursuant to SIPs and other requirements of the Act, including the feasibility and cost-effectiveness of such alternatives. The Administrator is to submit a report to Congress containing the results of the study, after allowing an opportunity for public comment, no later than June 1, 1997.

Paragraph 202(i)(3) provides that within three years after the report is submitted to Congress, but no later than December 31, 1999, the Administrator is to determine by rule, based on the study under paragraph (1), whether: (i) there is a need for further reductions in emissions to attain or maintain NAAQS, as provided in subparagraph (2)(A); (ii) the technology for meeting more stringent emission standards will be available as provided in clause (2)(A)(i) for passenger cars and light-duty trucks for model years not before MY 2003 and not later than MY 2006; and (iii) obtaining further reductions in emissions from such vehicles will be needed and cost-effective as provided in paragraph (2)(A)(ii). The rulemaking under this paragraph is required to commence within three months of submission of the study to Congress under paragraph (2)(B).

The three basic determinations—NAAQS need, technology availability, and need and cost-effectiveness of reductions from vehicles—are intended to establish a sound basis for deciding whether or not more stringent motor vehicle standards should be promulgated nationwide.

The first determination is whether there are areas in the country (taking into consideration the waiver provisions of section 209(b)) that need further emission reductions to attain or maintain the national standards beyond that required by the Act with H.R. 3030. Some believe further reductions will be necessary in order to achieve the health based air quality standards. Others have a different view, believing that the bill's requirements for all sources and the status of implementation of the Act at the time of the study will be adequate to meet those standards. The Committee wants a timely and thorough study by EPA, with public input, to determine this question.

The second determination is whether there is available technology to meet the more stringent standards of Table 3 to reduce these emissions from motor vehicles further for the applicable model years.

The third determination is need for, and cost-effectiveness of, obtaining further tailpipe reductions from cars and light trucks, taking into consideration alternative means of attaining or maintaining the ozone NAAQS under State SIPs or other provisions of the Act, including the feasibility and cost-effectiveness of such means. Assuming, for example, the first two determinations show a national need for such further reductions and that technology is available for achieving these reductions from such vehicles, the critical question is whether the reductions should come from the motor vehicles or from other sources. The Administrator should assess whether there is a need to further control tailpipe emissions beyond the requirements of the Act as amended by this bill, which include a broad range of Title II requirements. The Administrator should also assess whether such tighter controls are cost-effective compared to alternatives that are also available to achieve the needed reductions in emissions if motor vehicle standards are not tightened. If he thus finds that more stringent tailpipe controls are needed and cost-effective, then he must adopt such controls.

As noted, the Administrator must conclude positively in the case of the three determinations. Subparagraph (3)(B) provides that the Administrator shall not promulgate more stringent standards than in effect if he determines in the rulemaking under subparagraph (3)(A) that: (i) there is no need for further reductions in emissions as provided in paragraph (2)(A); (ii) the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i) for passenger

cars and light-duty trucks for model years not before MY 2003 and not later than MY 2006; or (iii) further reductions in emissions from such vehicles are not needed and will not be cost-effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

Nothing in this section prohibits the Administrator from promulgating more stringent standards under the authority provided in subsection 202(a) at any time after the determination under paragraph (3) of this subsection for the applicable vehicles.

Subparagraph (3)(C) provides that the Administrator shall promulgate either the standards and useful life periods set forth in Table 3 of paragraph (1) or alternative standards more stringent than those in effect under subsections (g) and (h), if the Administrator determines in the rulemaking under subparagraph (3)(A) that: (i) there is a need for further reductions emissions as provided in paragraph (2)(A); (ii) the technology for meeting more stringent emission standards will be available as provided in paragraph (2)(A)(i) for passenger cars and light-duty trucks for model years not before MY 2003 and not later than MY 2006; and (iii) further reductions in emissions from such vehicles will be needed and cost-effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii). In such case, the standards or useful life periods promulgated by the Administrator shall take effect with respect to any vehicles or engines not earlier than MY 2003, but not later than MY 2006.

The bill includes an important disclaimer that nothing in paragraph (3) is to be construed by the Administrator or a court as a presumption by Congress that any standard or useful life period in Table 3 is to be promulgated in the rulemaking required under this paragraph. There is no prejudgment of the rule by Table 3.

Actions required of the Administrator in accordance with this section are to be treated as a nondiscretionary duty for purposes of section 304(a) (relating to citizen suits). The Committee wants to ensure that EPA will do the study and rulemaking within the applicable timeframe.

Subparagraph 202(i)(3)(E) provides that the standards and useful life periods specified in Table 3 go into effect by operation of law unless the Administrator determines by rule, in accordance with the provisions of subsection 202(i), that such standards should not go into effect. The regulations take effect with respect to model years commencing after January 1, 2003. The standards and useful life periods in Table 3 fail to go into effect only if the Administrator has determined not to promulgate more stringent standards as provided in subparagraph (B), has determined to postpone the effective date of the standards in Table 3 of paragraph (1), or has determined to establish alternative standards as provided in subparagraph (C) with respect to model years commencing after January 1, 2003.

Revised standards.—Subparagraph (C) of section 202(b)(1) is revised to authorize the Administrator to promulgate regulations under section 202(a)(1) revising any standard as needed to protect public health or welfare taking into account costs, energy and safety. Any such revised standard must require a reduction in emissions from the standard previously applicable. Any such revision may provide for a phase-in of the standard.

Averaging.—The Committee specifically rejected language in H.R. 3030 as introduced that would have required the Administrator to allow manufacturers to certify compliance with emission standards through “averaging” the emissions of vehicle or engine families. The effect is to keep present law.

Section 203. Conforming amendment

Section 203 amends section 206(f) of the Act to specify that light-duty trucks of 6000 lbs gvwr or less must comply with the emission standards under section 202 regardless of the altitude at which they are sold or operated.

Section 204. Carbon monoxide emissions at cold temperatures

Section 204 of the bill adds a new subsection (i) to Clean Air Act section 202, providing for a reduction in emissions of CO from passenger cars and light-duty trucks when operated at 20 degrees Fahrenheit. As a first step, the section establishes cold temperature CO emission standards to be met by 1993 and later model year passenger cars and light-duty trucks when operated at 20 degrees Fahrenheit. The Administrator is directed to promulgate regulations within 12 months of enactment establishing a passenger car cold temperature CO standard for 1993 and later model years of no higher than 10 grams per mile and requiring that light-duty trucks meet a standard of comparable stringency.

Standards are to be phased in over 1993 through 1995 model years. At least 40 percent of 1993 model year vehicles produced by each manufacturer are required to meet the standards. The standards apply similarly to 80 percent of the MY 1994 vehicles, and 100 percent of the MY 1995 vehicles. In addition, this section authorizes the Administrator to require reductions in CO emissions from heavy-duty vehicles when operated at cold temperatures. Process for implementation of this provision will be carried out in the same manner as other new motor vehicle requirements.

For the second step, the Administrator is directed to assess by December 31, 1993, the need for, and feasibility of, further reductions in cold temperature CO emissions, and is authorized to promulgate regulations applicable to 1998 and later model year vehicles requiring further reductions in cold temperature CO emissions, as warranted.

Section 205. Evaporative emissions

Section 205 adds a new subsection 202(k) to the Clean Air Act directing the Administrator to issue regulations requiring reductions in evaporative emissions from all gasoline-fueled vehicles during operation (running losses) and during sustained periods of nonuse (evaporative emissions), under summertime conditions conducive to the formation of ozone. The regulations should be performance, not design standards, and are to require the greatest degree of emissions reduction achievable by means reasonably expected to be available for production during the applicable model year, giving appropriate consideration to fuel volatility, and to costs, safety and energy factors. The regulations are to take effect as expeditiously as possible and phased in similarly to exhaust standards. The Administrator is to commence rulemaking under this section within 12 months of enactment. If final regulations are not promulgated under this section within 18 months after enactment of this subsection, the Administrator shall submit a statement to Congress containing an explanation of the reasons for delay and establishing a date certain for promulgation of such final regulations not later than 33 months after enactment.

Section 206. Control of vehicle refueling emissions

Section 206 of these amendments revises section 202(a)(6) of the Clean Air Act to require the Administrator within one year of enactment of this paragraph to promulgate standards requiring that all new light duty motor vehicles manufactured in the third model year after the model year in which the standards are promulgated, and in all subsequent model years, be equipped with onboard systems for control of evaporative emissions during vehicle refueling. The standards required to be promulgated under this paragraph are to apply to all new passenger cars and all light-duty trucks and are to provide a minimum evaporative emission capture efficiency of 95 percent. Evaporative emissions during vehicle refueling are a source of VOC emission that are not part of the engine exhaust. This requirement will substantially reduce motor vehicle evaporative emissions during refueling, a major source of VOC emissions from motor vehicles that is not part of the engine exhaust.

Paragraph 202(a)(6) directs the Administrator, in consultation with the Secretary of Transportation, to determine that onboard vapor recovery systems are safe. It is expected that this determination will be made before the promulgation of the regulations under this paragraph. The determination is an independent duty and shall not affect the Administrator's mandatory duty to promulgate regulations, subject to paragraph 202(a)(4), which provides that emission controls may not cause an unreasonable risk to safety.

Refueling emissions control has been a contentious issue for many years. This provision will resolve the safety issue.

The Committee has conducted an extensive investigation into the matter, particularly the safety of onboard controls. Hearings were held in October 1987.

There are two types of control. One at the pump, called "stage II," the other on the vehicle, called "onboard." For many years, California has required stage II controls in nonattainment areas. It is required in other States. New Jersey and New York are now under court order to install stage II controls. Both are doing so, but they have not fully completed the effort, because as recently noted by the Service Station Dealers of America, the equipment and qualified contractors apparently are lacking. This has also increased costs.

In July, 1987, EPA proposed the use of onboard systems, contending there were simple systems that were safe. Others disagreed, particularly several Federal and private safety organizations, such as the National Highway Traffic Safety Administration (NHTSA), the National Transportation Safety Board, the Insurance Institute for Highway Safety, and the National Safety Council. However, the Center for Auto Safety contends that there are no safety risks associated with onboard canisters. According to a March 24, 1988 report by the Center for Auto Safety:

The Environmental Protection Agency should move ahead as soon as possible with onboard systems to control refueling emissions. The potential crash fire risk from onboard systems is small. The improved onboard systems under EPA's proposed evaporative control rule are only marginally more complex than present onboard systems. Any increased crash safety risk from onboard systems would be a marginal increase of an already minimal safety risk and could easily be handled by improved technology.

In a recent letter to the Committee, NHTSA explained its safety concerns:

Our major concern centers on the additional engine compartment and underbody heat generated when onboard refueling vapors are burned in the engine and exhaust system. Safety-related problems continue to occur with existing evaporative vapor control systems and result in safety-related recalls. The problems would be aggravated if onboard refueling vapor recovery systems were required. In addition, we are concerned that there has been insufficient testing of the "simple" onboard vapor recovery system in real world summertime temperatures to adequately address these safety issues.

EPA never finalized the rule, although EPA believes onboard controls are safe. The Committee wants onboard controls that are effective and safe. No one wants a rule that requires controls for the consumer that present safety problems. Those problems need to be resolved in the rulemaking under section 206(a). The bill provides the mechanism for this to occur. It should.

Paragraph 202(a)(6) also provides that the requirements for installation of stage II vapor recovery for gasoline dispensing systems in section 182(b)(3) shall not apply to areas classified under section 181 as moderate ozone nonattainment areas after the promulgation of the onboard vapor recovery regulations under paragraph 202(a)(6). The Administrator is further authorized to revise or waive the application of section 183(b)(3) for areas classified under section 181 as serious or severe ozone nonattainment areas after such time as the Administrator determines by rule that onboard emission control systems required under this paragraph are in widespread use throughout the motor vehicle fleet. In allowing areas to waive application of the requirement for stage II vapor recovery in future years, the Committee recognizes that full implementation of onboard vapor recovery, after a full turnover of the fleet, could render stage II vapor recovery at gasoline dispensing stations unnecessary.

Section 207. Mobile source-related air toxics

Section 207 of the amendments adds a new subsection 202(1) which requires the Administrator to complete within 18 months of the bill's enactment a study of the need for, and feasibility of, controlling toxic emissions which are currently not regulated directly under Title II and associated with motor vehicles and motor vehicle fuels. The study is to focus on those categories of emissions that pose the greatest risk to human health, or about which significant uncertainties remain, including, at a minimum,

emissions of benzene, formaldehyde, and 1,3 butadiene. The study is to be available for public review and comment in proposed form sufficiently early that the 18 month deadline for final completion can be met. The Committee expects that study will be submitted upon completion to this Committee and the Senate Committee on Environment and Public Works.

The Administrator is directed within 54 months of enactment to promulgate regulations, based on the study, under subsection 202(a)(1) or subsection 211(c)(1) containing reasonable requirements for control of hazardous emissions from motor vehicles and motor vehicle fuels. Such requirements shall include standards for such vehicles or fuels, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology that will be available, taking into consideration the availability and costs of the technology, noise, energy and safety factors, and lead time. The standards must achieve emission reductions from all classes and categories of motor vehicles, unless the Administrator determines that reductions from a class or category are not achievable through either vehicle emission controls or fuel changes. Such regulations are not to be inconsistent with standards under section 202(a). The regulations under this subsection must apply, at a minimum, to benzene and formaldehyde.

The Committee expects the regulations issued under this paragraph to have significant public health benefits in reducing the contribution of mobile sources to cancers attributable to hazardous air pollutants.

Section 208. Emission control diagnostics systems

Section 208 of these amendments adds a new section 202(m) which directs the Administrator to require that motor vehicles be equipped with computer systems capable of diagnosing problems affecting emission-related systems and alerting vehicle owners to the need for repairs to maintain compliance with emission standards. Specifically, this section requires that emission control diagnostics systems be capable of: (1) identifying emission-related systems malfunctions or deteriorations; (2) alerting the vehicle operator to the need for maintenance; (3) storing such information; and (4) providing access to such information for maintenance and testing. Such systems must be used on all classes and categories of motor vehicles, foreign and domestic.

The Administrator is required to commence a rulemaking under this subsection within 12 months after enactment of this subsection. If final regulations are not promulgated within 18 months after enactment, the Administrator is to provide to the Congress an explanation for the delay and a date certain for promulgation of final regulation. Such final regulations must be promulgated not later than 33 months after enactment. Regulations under this subsection are to be effective after such period as the Administrator finds is necessary for the development and application of the required technology.

Paragraph (3) of subsection 202(m) gives the Administrator authority to require that States include inspection of onboard diagnostic systems as part of State inspection and maintenance programs. Title I of the bill requires ozone and CO nonattainment areas with enhanced inspection and maintenance programs to include inspection of onboard diagnostic systems as part of such enhanced programs. The purpose of this paragraph is to allow the Administrator to extend such a requirement to other nonattainment areas.

Paragraph (4) of subsection 202(m) provides that the regulations under this subsection shall require manufacturers to provide standardized connectors for accessing the emission control diagnostic system, standardized access to the emission control diagnostic systems through unrestricted connectors requiring no access code or device available only from a vehicle manufacturer, and an output of data from the emission control diagnostic system through such connectors to a scanning device usable without the need of any unique decoding information or device.

Paragraph (5) provides that the Administrator is to require manufacturers to make available any information reasonably necessary to fully utilize the emission control diagnostic system and needed to make effective emissions related repairs in a timely manner and under reasonable terms and conditions. The requirement of this paragraph is subject to the trade secret protection provisions of section 208(c), since the computer software can include very sensitive data. However, no information may be withheld under section 208(c), if that information is directly or indirectly provided by the manufacturer to franchised

dealers or other persons engaged in the repair, diagnosing or servicing of motor vehicles. The Administrator is to require that information and data from the emission control diagnostic system not require the use of any component or service identified by brand, trademark, or corporate name as provided by subparagraphs (A) and (B) of section 207(c)(3).

The requirement that access to emission control diagnostic systems be standardized is intended to assure that the emission control diagnostic systems produce information which will be widely accessible, and can therefore be expected to be more widely utilized and to produce greater emission reductions. Additionally the requirement for standardization is intended by the Committee to assure that manufacturers are not able to use such diagnostic systems to achieve an effective monopoly on automotive servicing by designing systems that can only be accessed at franchised dealers. Manufacturers are permitted to withhold information on the basis of trade secret protection. However, such information may not be withheld if it is provided to franchised dealers, thus assuring that trade secret provisions cannot be utilized to advantage dealers over independent repair facilities. This is important for a competitive aftermarket servicing industry in which independent automotive repair facilities will have equal access to all diagnostic systems.

Under paragraph 202(m)(6) the Administrator is authorized to review the data output from diagnostic systems, and revise the regulations under this section to improve the utility of the data produced by such systems for emission repair effectiveness.

Section 207(a) of the Clean Air Act concerning the useful life of automotive pollution controls and warranty periods is amended to include emission control diagnostic systems under the coverage of the term "designed for emission control."

Section 209. Auto warranties

Section 209 amends section 207 of the Clean Air Act to establish a warranty period for MY 1995 and later motor vehicles and motor vehicle engines of 2 years/24,000 miles. This warranty period applies to all automotive parts and systems except the catalytic converter and the electronic control unit, which are specifically listed as "major emission control components" under new paragraph 207(i)(2), and are to remain subject to a warrant period of 5 years/50,000 miles.

In addition, subsection 207(a)(1) is amended to provide that the warranty period over which the vehicle or engine must be warranted to be free from pollution control defects for MY 1995 and later vehicles is to be reduced from 5 years/50,000 miles to 2 years/24,000 miles.

H.R. 3030 deals with the controversial warranty language in the Clean Air Act. In 1970, the original Act contained a certification requirement that the vehicle manufacturers test and certify that the vehicle's emission control system was designed to meet the requirements of the law for 5 years/50,000 miles. At the same time, it gave EPA the authority to recall vehicles found to contain defective emissions components during the first 5 years/50,000 miles of in-use service. Additionally, the vehicle manufacturer was required to warrant that the emissions control system was free of defects in materials and workmanship; together with a performance warranty requiring that if a consumer, who properly maintained his vehicle, failed an emissions inspection, he could return the vehicle to the manufacturer. The manufacturer would be liable to make whatever repairs were necessary to allow the vehicle to pass the test during the first 5 years/50,000 miles.

Some time ago the House Small Business Committee conducted hearings and studied the warranty issue for a year. They unanimously concluded that the government mandated warranties in the Act were anticonsumer because they eliminated the consumer's flexibility to choose where he could have his car serviced. They concluded that to keep the warranty valid, all parts and service needed to be performed by the vehicle manufacturer's franchised dealer. They also noted that the warranties eliminated the consumer's ability to work on the car himself without voiding the warranty. That Committee stated that the warranties in the Act were anticompetitive because they directed the servicing of vehicles away from the independent service industry that historically has done 75-80 percent of the service work for the past 75 years. That Committee also concluded that the legislatively mandated warranties created a monopoly in parts sales and service to the vehicle manufacturer's franchised

dealer, that he would otherwise not have been able to obtain in open competition. However, consumer groups do not share the view that the existing warrant provisions are anticonsumer.

The 1977 amendments to the warrant provision of the Act attempted to address the anticonsumer and anticompetitive issues by reducing the performance warranty to 2 years/24,00 miles on non-critical components, while covering emission critical components up to 5 years/50,000 miles. Parts covered by the extended warranty were defined as, "a catalytic converter, thermal reactor, or other component installed in or on a vehicle for the sole or primary purpose of reducing emissions. Such term shall not include those vehicle components which were in general use prior to model year 1968."

After enactment of the 1977 amendments, EPA said Congress could not have meant what it said about reducing the warranty and proceeded to regulatorily reinterpret the statute. Using the words in the definition, "or primary," EPA published a comprehensive list consisting of well over 100 parts to be covered for 5 years/50,000 miles. This "advisory" list created confusion between consumers and the independent service industry that exacerbated the dislocation of independent parts sales and service in favor of the vehicle manufacturers and their franchised dealers.

The Committee bill provides that initial vehicle manufacturer certification of the emissions system durability should be increased to 100,000 miles and the recall provisions be increased to 7 years/75,000 miles. That gives the consumer durability protection without doing injury to consumers freedom of choice or injury to the independent parts and service industry.

However, the Committee adopted language that clarified the intent of Congress in 1977 to reduce the anticonsumer and anticompetitive impact of the emission warranties. The amendment requires that vehicle manufacturers warrant all emissions system parts for 2 years/24,000 miles and provide extended protection on the two most critical parts, the catalytic converter and engine control module, for 5 years/50,000 miles.

The adoption of this language provides the consumer with long term durability protection through certification and recall provisions, along with balanced and effective warranty coverage while eliminating the anticonsumer and anticompetitive problems inherent in such warranties.

The Committee recognized the fact that the emission warranties were small business economic issues and not ones dealing with clean air. They have the effect of establishing a federally mandated service contract between the vehicle manufacturer and the car owner at the expense of the small businesses that make up the independent aftermarket industry. The Committee believes the warranties needed to be addressed to eliminate consumer confusion, along with unintended anticompetitive situations that had evolved from their earlier adoption and implementation.

Section 210. Heavy-duty trucks

Section 210 extensively revises Clean Air Act section 202(a)(3)(A) to provide the Administrator with greater flexibility in setting emissions standards for heavy-duty vehicles or engines (HDEs). Specifically, the section deletes the statutory standards (discussed earlier in this report) for HDEs, and instead requires the Administrator to set technology-forcing emission standards, considering cost, energy and safety factors. Although lead time is not specifically mentioned in this section, the Committee believes that engine manufacturers should be provided adequate time in which to design, develop, tool, test and commercially manufacture the technology needed to meet new standards.

It is the intent of the Committee that current standards for heavy-duty vehicles and engines remain in effect, until such standards are superceded by more stringent standards promulgated under the new provisions. Section 202(a)(3)(A)(ii) is further revised to clarify that in setting HDE standards the EPA may differentiate among HDEs based on the type of fuel used.

Finally, the Administrator is being provided for the first time with authority to study and regulate the emissions from rebuilt engines. As with other regulations, the Administrator must take costs, technological feasibility and lead time into consideration

in determining whether and how to set emission standards for rebuilt engines. Moreover, inasmuch as rebuilt work is performed at factory-owned, factory-authorized and myriad small, independent businesses, the Administrator should insure that any rebuilt standards are feasible in practice.

Section 211. Nonroad engines and vehicles

Section 211 of the Clean Air Act Amendments of 1990 amends section 213 of the Act to direct EPA to complete within 18 months of enactment a study of emissions from nonroad engines and vehicles to determine if such emissions cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Paragraph 213(a)(2) provides that within one year of completion of the study, the Administrator, based on the results of such study, shall determine whether emissions of CO, VOCs, and NO₅x FROM NEW NONROAD ENGINES, ETC., ARE SIGNIFICANT CONTRIBUTORS TO OZONE OR CO CONCENTRATIONS IN MORE THAN ONE AREA WHICH HAS FAILED TO ATTAIN THE NAAQS FOR OZONE OR CO.

If the Administrator makes an affirmative determination under paragraph (2), he is required within 18 months to promulgate such regulations as he deems appropriate containing standards applicable to emissions from classes or categories of nonroad vehicles which in his judgment contribute to such air pollution. The regulations are to apply for the useful life of the vehicle, as determined by the Administrator. The Committee expects the Administrator to establish an effective and reasonable program for control of nonroad emissions under this section.

Paragraph (4) of revised section 213(a) provides that if the Administrator determines that emissions from nonroad vehicles not specifically mentioned in paragraph (2) (which lists CO, VOCs, and NO₅x) SIGNIFICANTLY CONTRIBUTE TO AIR POLLUTION WHICH MAY REASONABLY BE ANTICIPATED TO ENDANGER PUBLIC HEALTH OR WELFARE, THE ADMINISTRATOR MAY PROMULGATE SUCH REGULATIONS AS HE DEEMS APPROPRIATE CONCERNING STANDARDS APPLICABLE TO EMISSIONS FROM CLASSES OR CATEGORIES OF NONROAD VEHICLES WHICH IN HIS JUDGMENT CONTRIBUTE TO SUCH AIR POLLUTION. THE REGULATIONS ARE TO APPLY FOR THE USEFUL LIFE OF THE VEHICLE, AS DETERMINED BY THE ADMINISTRATOR. THIS PARAGRAPH WOULD PROVIDE THE ADMINISTRATOR WITH AUTHORITY TO ESTABLISH REGULATIONS FOR HAZARDOUS AIR POLLUTION EMISSIONS FROM NONROAD VEHICLES TO THE EXTENT THAT SUCH EMISSIONS MAY REASONABLY BE ANTICIPATED TO ENDANGER THE PUBLIC HEALTH OR WELFARE.

Standards established under this section are to take effect at the earliest possible date, considering the lead time needed to permit the development and application of the requisite technology, and giving appropriate consideration to the cost of compliance within such period, and energy and safety.

The term "nonroad engine" is defined for purposes of this section to include certain internal combustion engines not used in a motor vehicle or a competition vehicle, while a nonroad vehicle is a vehicle powered by nonroad engine that is not a motor vehicle and not used solely for competition. Stationary internal combustion engines are to be regulated under Title I of this Clean Air Act amendments of 1990, and are not subject the requirements of this section.

Standards issued under this subsection are to be subject to sections 206, 207, 208, and 209, with such modifications of the applicable implementing regulations as the Administrator deems appropriate. Section 209 of the Act is amended to provide that no State or political subdivision shall adopt or enforce standards relating to the control of emissions from new nonroad vehicles subject to regulations under this Act. This preemption does not apply to existing nonroad vehicles or engines.

Section 212. Vehicle certification

Section 212 of the bill revises Clean Air Act section 206 to ensure that vehicles that pass the Federal test for determining compliance with emission standards can also pass State inspection and maintenance (I/M) tests. The Administrator is directed to revise the regulations governing the certification of vehicles to include test procedures capable of determining whether properly maintained 1993 and later model year passenger cars and light-duty trucks will pass EPA-sanctioned I/M tests under conditions encountered in the conduct of such tests. EPA's revised test is to reflect reasonably likely I/M test conditions as pertains to fuel characteristics, ambient temperature and short waiting periods before tests are conducted. A manufacturer's vehicles must be able to pass the revised test to receive certificates of conformity.

Section 213. In-use compliance-recall

Section 213 also revises Clean Air Act section 207(c) to establish in paragraph (4) intermediate standards applicable in use to motor vehicles of less than 6000 gvw subject to the emission standards under Table I of subsection 202(g) in MYs 1994 and 1995. These standards apply to 40 percent of each manufacturer's sales volume in 1994 and 80 percent in 1995. The interim standards are for nonmethane hydrocarbons and CO and are applicable until a more stringent standard takes effect under paragraph (5), except that any more stringent standards in effect before enactment of this paragraph are to remain in effect. The intermediate in use standards under this paragraph are established in Table A of this subsection. Table A of the bill includes in use emission standards for passenger cars and light-duty trucks weighing 3750 pounds loaded vehicle weight or less of 0.32 grams per mile for nonmethane hydrocarbons and 5.2 grams per mile for CO. The applicable useful life period for all Table A standards is five years or 50,000 miles, whichever first occurs.

More stringent in use emission standards specified in Table B of the bill are to be phased in under paragraph (5) beginning in MY 1996, with 40 percent of all passenger cars and all light-duty trucks, increasing to 80 percent in 1997, and 100 percent in 1998. (Vehicles not subject to the tighter standards under paragraph (5) while such standards are being phased in model years are to remain subject to the in-use standards provided in Table A.) Table B includes two sets of emission standards: a tighter set of standards, conforming exactly to the certification standards, which applies for the first 50,000 miles of use, and a somewhat less stringent set of emission standards for which the useful life period is to be seven years or 75,000 miles, whichever first occurs.

In essence the Table B standards provide that covered motor vehicles must continue to achieve the required certification standards for a full 50,000 miles, which is the useful life period applicable under current law. In the additional period covered by the extended useful life period of seven years or 75,000 miles, slightly less stringent standards will apply.

Section 214. Compliance program fees

Section 214 provides the Administrator with specific authority to assess foreign and domestic manufacturers fees that are appropriate, equitable, and nondiscriminatory to recover the costs associated with operating these specified programs, including the development and implementation of related policies, procedures and regulations. It grants the Administrator broad discretion in devising a fee schedule and expressly authorizes a fee schedule based on the number of vehicles produced under a certificate of conformity. It also specifies that any fees collected be deposited in a special fund in the U.S. Treasury for use by EPA in carrying out the program for which the fees were collected.

The authority granted the Administrator under this section must be carefully exercised so as to avoid proceeding with "gold plated" compliance programs since the costs will not fall on the government.

Section 215. Information collection

Section 215 amends section 208 to extend the requirement to maintain records and provide information to manufacturers of new motor vehicle or engine parts or components and other persons subject to this part. It also requires manufacturers of vehicles, engines, or parts provide such data as the Administrator may reasonably require to determine compliance with applicable

requirements under the Act and to assist in the development of new regulations. EPA can require testing that is not otherwise available under this part, including fees for testing. Correspondingly, this section broadens the Administrator's inspection authority. This section does not authorize contractors whether or not they are acting as representatives of the Administrator to conduct inspections or have access to business sensitive information unless they are Federal officers or employees.

Section 216. Fuel Volatility

Section 216 requires the Administrator to promulgate within six months of the bill's enactment regulations requiring additional reductions in the volatility of gasoline during the high ozone season (approximately the summer months). The section specifies a maximum Reid vapor pressure standard of 9.0 pounds per square inch and requires the Administrator to establish more stringent Reid vapor pressure standards as needed to achieve comparable evaporative emissions (on a per vehicle basis) nationwide, taking into account such factors as enforceability, environmental need and costs. The regulations implementing the volatility requirements are to take effect no later than the 1992 ozone season. The regulations shall permit gasoline containing at least 9 but not more than 10 percent ethanol (by volume) to exceed the volatility requirements by up to 1.0 pounds per square inch.

Section 217. Diesel fuel sulfur content

Section 217 of the Clean Air Act amendments of 1990 revises section 215 of the Act to require a reduction in the sulfur content of diesel fuel that will reduce diesel vehicles' emission of sulfates and ease compliance with the 1994 particulate matter standard applicable to heavy-duty diesel vehicles. Specifically, section 211 as revised prohibits as of October 1, 1993, the manufacture, sale or transport of motor vehicle diesel fuel having a sulfur content of greater than 0.05 percent (by weight) or a cetane index below 40. This section also requires the Administrator to promulgate within 12 months of the bill's enactment regulations to implement and enforce the prohibition. Also the Administrator is specifically authorized to require refiners to dye fuel not subject to the sulfur content limitations in order to segregate it from the regulated fuel.

To reflect the change in diesel sulfur content that will occur over the useful life of 1991 through 1993 heavy-duty diesel engines, section 217 provides that the sulfur content of fuel used to certify diesel engines for those model years be 0.10 percent (by weight). It further provides that certification fuel used for 1994 and later model year diesel engines comply with the lower sulfur content and cetane index minimum requirements applicable to motor vehicle diesel fuel after October 1, 1993.

This provision compliments the provisions in section 212 regarding the diesel particulate standard.

Section 218. Lead substitutes for gasoline additives

A new subsection is added to section 211 of the Act relating to the registration of certain lead substitute gasoline additives. The subsection establishes procedures for EPA, in consultation with the Department of Transportation, to evaluate the effectiveness of such additives for reducing valve seat wear. Such procedures are to serve as a complement to, and not a substitute for, current procedures for registering additives.

Section 219. Nonroad fuels

Section 219 amends section 211 of the current Act, which authorizes the Administrator to regulate motor vehicle fuels and fuel additives. The Administrator's authority under section 211 is expanded to provide authority to include fuel and fuel additives for nonroad vehicles and nonroad engines, for which section 208 of this bill authorizes the Administrator to establish emission standards.

Section 220. Fuel waivers

Section 220 amends section 211(f) to clarify that the requirement to obtain waivers for new fuels and fuel additives not substantially similar to the fuels used in vehicle certification applies not only to unleaded gasoline but to all other fuels and fuel additives, including leaded gasoline, diesel fuel, and consumer additives.

Section 221. Market-based alternative controls

Under new Clean Air Act section 214, the Administrator is directed to issue regulations within 12 months of the section's enactment to allow fuel refiners to engage in "fuel pooling" to the maximum extent feasible in ozone nonattainment areas with a 1988 ozone design value at or above 0.18 parts per million and a population above 250,000. The regulations are to establish performance standards for motor vehicle fuels marketed in those areas based on likely emissions reductions that would be achieved by the control measures for which alternative measures could be substituted. Fuel refiners could then choose to undertake emission control measures different in type or degree from the prescribed measures they would replace, so long as they demonstrate to the Administrator that the combination of measures they select would meet the performance standards. Any fuel refiner seeking approval of alternative control measures must submit a proposal to the Administrator for such measures within 24 months of enactment, which must be approved or disapproved within 30 months of enactment. Fuel refiners are also authorized to trade emission reduction credits for use in demonstrating compliance with performance standards. If refiners could not demonstrate alternative means of meeting the performance standards, they would be required to comply with the prescribed control measures.

Section 214(b) authorizes, but does not require, the Administrator to allow fuel refiners to control emissions through alternative means in areas that are not subject to clean-fuel requirements under section 212(d). If the Administrator promulgates regulations allowing such alternative controls, the Administrator must insure that the alternative controls achieve at least the same emission reductions over the same time period as the controls otherwise required under the Act would achieve. Such reductions must also occur in the same areas in which the reductions otherwise required under the Act would occur. It is the intent of the Committee that any regulations authorized under this subsection be "emissions neutral." They should not increase the level of emissions in any area above the level that would be achieved if no alternative controls were used.

Section 222. State fuel regulation

Section 211 of the Clean Air Act is amended to make two changes to section 211(c)(4)(A)(ii) regarding the preemption of State fuel regulations by Federal rules. First, the revision clarifies that a Federal fuel or fuel additive regulation only preempts a nonidentical State regulation governing the same component or characteristic of the fuel or fuel additive. Second, the revised section 211 expands the basis on which EPA may approve SIP provisions that regulate motor vehicle fuel or fuel additives in a manner not identical with applicable Federal regulations. The current Act states that EPA may approve inconsistent State fuel or fuel additive regulations when such regulations are "necessary to achieve" primary NAAQS. This section provides that the Administrator may find that State regulation is "necessary to achieve" a standard if no other reasonable or practicable measures are available to bring about timely attainment. Nothing in the section is intended to limit the current authority of the Administrator to approve State regulations of fuels or additives.

Section 223. Enforcement

Section 223 broadens and strengthens the Administrator's enforcement authority for regulation of motor vehicles and fuels in several ways. The section amends section 203 to conform to new provisions, including new section 212 (relating to clean-fuel vehicles and buses) and amended section 208 (relating to record keeping and reporting).

This section also further revises section 203 to extend liability for tampering with emission controls to individual vehicle owners and to manufacturers or sellers of devices used to defeat or impair emission controls.

In addition, the amendment revises section 205 to raise from \$10,000 (set in 1970) to \$25,000 the maximum civil penalty that can be levied for a violation of certain vehicle requirements.

New authority is provided to the Administrator to assess administrative penalties for violations of sections 203, 211 and 212 that total no more than \$200,000 (unless the Administrator and the Attorney General determine that a case involving a larger penalty amount is appropriate for administrative assessment). Any such assessment can only be made after a hearing before the Administrator, and the amount of the penalty is to be based on the weighing of statutorily prescribed factors.

This section also revises the section 211(d) penalty provision, which currently provides for a mandatory forfeiture of \$10,000 per day for violations of section 211 or fuel regulations issued under that section. As revised, section 211 replaces the mandatory forfeiture provision with a provision for a civil penalty of up to \$25,000 per day for each violation plus the economic benefit of noncompliance. In addition, the section clarifies that in the case of violations of fuels standards based on a multi-day averaging period (such as exists in the lead phase-down program), each day during the averaging period is intended to constitute a separate day of violation. Also provided is injunctive authority to restrain violations of fuels regulations, as is already available for violations of vehicle and stationary source requirements.

Section 224. High altitude testing

This section requires that EPA promptly establish at least one new testing center at a site that represents high altitude conditions.

Section 225. Technical amendments

Section 225 revises various sections of the Act to delete outdated provisions and to improve the organization of Title II.

Title III: Provisions for Control of Hazardous Air Pollution

INTRODUCTION

Title III amends section 112 of the Clean Air Act to establish a new program for the control of hazardous air pollutants. Pollutants controlled under this section tend to be less widespread than those regulated under the NAAQS established under section 109 of the Act, but are often associated with more serious health impacts, such as cancer, neurological disorders, and reproductive dysfunctions. Because of their serious impacts, hazardous air pollutants are subject nationally to uniform, source category and subcategory specific controls.

BACKGROUND

Hazardous air pollutants are air pollutants that can cause serious illnesses, such as cancer, or death. In theory, they were to be stringently controlled under the existing Clean Air Act section 112. However, as already noted, only seven of the hundreds of potentially hazardous air pollutants have been regulated by EPA since section 112 was enacted in 1970.

SUMMARY OF TITLE III

“Hazardous air pollutants” versus “criteria air pollutants”

The Clean Air Act distinguishes between two categories of pollutants: hazardous air pollutants and criteria or conventional air pollutants. Criteria air pollutants, as noted earlier, are defined as pollutants that “endanger public health or welfare” and “result from numerous or diverse mobile or stationary sources.” These pollutants tend to be more pervasive, but less potent, than hazardous air pollutants. Examples include ozone, CO, and PM-10. The Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for these pollutants, which the States have responsibility for achieving through State Implementation Plans (SIPs).

Hazardous air pollutants are pollutants that pose especially serious health risks. Under existing law, they are pollutants that “cause or contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.” They may reasonably be anticipated to cause cancer, neurological disorders, reproductive dysfunctions, other chronic health effects, or adverse acute human health effects.

Health and environmental effects from toxic emissions

Cancer risks from toxic emissions.—EPA, in a September 1989 draft report, presented an analysis of cancer risks in the U.S. from outdoor exposure to airborne toxic pollutants. The document, according to EPA, provides “updated information to suggest priorities for air toxics control.” It states:

This analysis is based primarily on information derived from recent studies and reports. Results are expressed as cancer risks from individual pollutants and source categories in terms of excess lifetime individual cancer risks ¹ and nationwide annual cancer cases.

Health risks due to indoor exposure and noncancer health effects resulting from outdoor exposure are not included in this analysis but are addressed in separate studies. ² Risks from indoor exposures to certain pollutants can be significant because of higher indoor concentrations and the fact that most people spend much of their time indoors. Noncancer risks from outdoor exposure also may be significant but more information is needed to adequately quantify these risks.

About 90 toxic air pollutants and 60 source categories were addressed in one or more of the studies examined. Additional risks associated with other pollutants and sources are uncharacterized. Of particular concern is the absence of information on pollutants secondarily formed in the atmosphere. Only one (formaldehyde) is considered in this analysis.

Significant uncertainties are associated with estimating risk. These are due to both data limitations and assumption inherent in our current risk assessment methodology and the methodology required to combine and extrapolate information from individual studies to develop national estimates.

Assumptions about cancer potencies of various chemicals or chemical mixtures are generally considered to overestimate the risk, as do assumptions about exposures. Uncertainties such as those due to missing pollutants, uncharacterized sources, and pollutant transformation in the atmosphere will underestimate the risk.

Major findings on national cancer incidence and lifetime individual risk, highlighted below, are subject to uncertainties and data limitations as noted above.

Cancer incidence

Total excess cancer cases were estimated to be between 1,700 and 2,700 per year nationwide. This is equivalent to between 7 to 11 cancer cases per year per million population.

Of the approximately 90 pollutants evaluated, 12 accounted for over 90% of total annual cancer incidence. Of these, PIC (products of incomplete combustion) was responsible for about 35% of the total. Other major contributors include, 1,3-butadiene, hexavalent chromium, benzene, formaldehyde, and chloroform.

Motor vehicles accounted for almost 60% of total cancer incidence. Other area sources and point sources each accounted for approximately 20% of the total.

Lifetime individual risk

Aggregate maximum lifetime individual risks exceeding 10^{-4} WERE REPORTED IN ALMOST ALL STUDIES. RISKS OF 10^{-3} OR GREATER FROM INDIVIDUAL POLLUTANTS WERE REPORTED ADJACENT TO VARIOUS TYPES OF SOURCES.

Average lifetime individual risks in urban areas from exposure to many pollutants generally are between 10^{-4} AND 10^{-5} BUT RANGED FROM 10^{-3} TO 10^{-6} . THESE LEVELS RESULT FROM EXPOSURE TO MOBILE AND STATIONARY SOURCES COMBINED.

The relative contribution of pollutants and sources to risk in a specific urban area can vary significantly, but the total risk was of the same general order of magnitude based on the urban areas studied.

A study by Tulane University reported that the lung cancer rate for residents living within a mile of major chemical plants is four times the national average.³ A similar study by the West Virginia Department of Health found cancer rates twice the national average in neighborhoods near chemical plants.⁴

EPA has made preliminary estimates of the cancer risks created by individual plants, called the "ATERIS" report. Although these estimates were made for the purpose of comparing relative risks (not determining precise facility-specific risks), they represent a reasonable available approach to estimating the magnitude of risks posed by industrial facilities. As revised in January 1990, the EPA estimates found 149 facilities to be associated with lifetime cancer risks to the most exposed individual of greater than 1 in 10,000, including 52 plants with cancer risks greater than 1 in 1000, seven plants associated with cancer risks greater than 1 in 100, and one plant associated with a cancer risk greater than 1 in 10^5 . In each case, the analyses assumed a 70-year, constant exposure to the maximum long-term ambient concentration of the air toxic reduced by the plant.

The EPA estimates evaluated the risks caused by emissions of a single toxic air pollutant from each plant. But many facilities emit numerous toxic pollutants. The agency's risk assessments did not consider the combined or synergistic effects of exposure to multiple toxics, or the effect of exposure through indirect pathways (such as eating vegetables on which air toxics have been deposited). The analyses also did not evaluate the cancer risks created by industrial sources of some important carcinogenic emissions, including benzene and coke-oven emissions.

In a separate study of risks associated with coke oven emissions, EPA identified an additional 20 facilities associated with a lifetime cancer risk of greater than 1 in 1000 to the most exposed individual, including six facilities associated with a greater than 1 in 100 cancer risk.⁶

The Committee notes that not all experts are in agreement with EPA. A study by Dr. John D. Graham and others of Harvard School of Public Health states:

The cancer risk assessment methods used by EPA have important shortcomings that need to be understood by policy makers. When hard data are lacking, assumptions are made that are intended to produce an upper bound on actual cancer risk. The risk estimates for specific pollutants may be grossly inflated or, in some cases, too low (despite the conservative

assumptions). EPA is now reconsidering its approach to cancer risk assessment in light of new scientific information and several years of difficult experience with such a simplistic approach.

The results of EPA risk assessments suggest that hazardous air pollutants are not responsible for a significant proportion of the national cancer toll (e.g., less than 1 percent of annual cancer mortality is attributable to the 45 pollutants studied by EPA). Although EPA has estimated that up to 2,000 cancers per year may be attributable to air toxics, the agency's recent urban air mixture studies suggest that this figure is probably too large. Some citizens, however, are exposed to large personal risks of cancer due to air toxics. Hence, the rationale for new legislation should be understood more as a "risk equity" measure than a "public health" measure.

* * * * *

Risk assessment can be used to support two approaches to making benefit estimates: the public health approach and the individual equity approach. The former approach entails estimating the number of pollution-related cases of disease with an without the regulatory standard in question. The difference in the two "population risk" estimates is considered to be the public health benefit of the standard. The latter approach entails identifying the citizen with the highest risk of pollution-related disease, both with and without the standard in question. The difference in the two "individual risk" estimates might be considered the equity benefit of the standard.

Although in practice the public health approach is more widely used, some environmentalists are primarily concerned about the significant risks faced by heavily exposed citizens. EPA uses a concept called maximum exposed individual (MEI) to operationalize the individual risk approach. The MEI is often assumed to live at a factory's fence line for 70 years while breathing outdoor concentrations of pollutants for 24 hours a day. The MEI represents the highest theoretical exposure; it is thus hypothetical—i.e., no person is actually exposed to pollution under the described circumstances.

* * * * *

Much congressional attention has been devoted to the need for control of air toxics at large industrial (so-called "point") sources. However, our review suggests that indoor sources of air pollution and smaller, more diffuse "area" sources (e.g., wood stoves and dry cleaning operations) account for more emissions than do large industrial sources.

Other serious illnesses from toxic emission.—There have been no quantitative assessments of the noncancer risks created by toxic emissions although it is believed that toxic emissions can cause an array of serious illnesses besides cancer. These include birth defects, damage to the brain or other parts of the nervous system, reproductive disorders, and genetic mutations. In the case of emissions of some neurotoxins, even small doses can be lethal.

In 1987, senior EPA officials ranked qualitatively the noncancer risks created by 31 environmental problems within the agency's jurisdiction. This report, called "Unfinished Business, A Comparative Assessment of Our Environmental Problems," ranked these problems according to how important the problems were viewed by the public and how important problems were deemed by expert judgment and risk estimate. One of the 31 on the list was "hazardous/toxic air pollutants." According to the study, air toxics ranked as the second worst non-cancer health risk (and the sixth worst cancer problem on the list). The public polling data showed "air pollution" which includes hazardous/toxic air pollutants and criteria air pollutants to be ranked the fourth highest cause of concern on the list of environmental problems.

Environmental effects of toxic emission.—Toxics can cause adverse impacts to the environment as well as to human health. The Great Lakes in particular have been adversely affected, because their huge surface area acts as a sink for toxics that may come from air sources, some of which may be from hundreds of miles away. This problem was discovered when researchers found significant levels of PCBs and pesticides on remote Isle Royale National Park, a wilderness island in the middle of Lake Superior.

Many Great Lakes fish species are no longer considered edible because of toxic contamination.⁷ State agencies in every Great Lake State have issued health advisories warning that consumption of certain sport fish is unsafe due to elevated levels of PCBs, mercury, and other toxic pollutants. Michigan's Department of Natural Resources, in a January 13, 1990 letter to the Committee, said the "presence of PCBs is the most common reason for fish consumption advisories in the region." Atmospheric deposition contributes more than 50 percent of PCB loading in the upper Great Lakes and a significant, but undermined, portion of the mercury loading.⁸ These chemicals enter the bottom of the food chain at low levels, but through of process called "bioaccumulation" their concentrations increase as the chemicals move up the food chain. The species most commonly affected include fatty fish like lake trout and salmon in the case of PCBs (the chemical accumulates in their fat tissues) and large predator species like pike, muskie, and bass in the case of mercury.

Because of their small body weight, young children and fetuses are especially vulnerable to exposure to PCB-contaminated fish. One study has found long-term learning disabilities in children who had eaten high-levels of Great Lakes fish.⁹ Adults are also seriously affected. A recent study has found that a person eating one lake trout a year from Lake Michigan over his or her lifetime faces a cancer risk of 1 in 10,000.¹⁰

EPA's Administrator Reilly, in commenting on this PCB and an associated DDT problem in an April 1989 letter to the Committee, said:

Dichloro diphenyl trichloroethane (DDT) is a chlorinated hydrocarbon insecticide. It became popular during World War II and was used by soldiers to ward off mosquitos and lice in an attempt to curtail malaria and typhus. DDT became available for public use in 1946 and was widely used in both agriculture and the home. During the 1960's, the U.S. Department of Agriculture cancelled DDT registrations for some crops, household uses, and livestock. In January 1971, EPA initiated cancellation action for all remaining uses of DDT, except for public health purposes. Cancellation hearings were held from August 1971 to March 1972. On June 14, 1972, EPA announced final cancellation of all uses (except special cases where public health is involved) effective January 1, 1973.

Since DDT is very stable, it breaks down slowly in the environment. The residual DDT which is found in the Great Lakes is product which was legally used before the ban and has not completely broken down. It is highly unlikely that any of the DDT detected in the Lakes would have originated in Central and South America, the chemical has not shown that kind of environmental mobility. Studies conducted by the Agency have shown significant decreases in the amount of DDT detectable in the environment, particularly since 1972. There are, however, still traces of the chemical in the environment and these traces should continue to exist (in decreasing amounts) for the next few years.

Similarly, polychlorinated biphenyls (PCBs) are chemically stable and break down very slowly in the environment. Since the 1920s, U.S. industries relied on PCBs for use in electrical equipment (such as transformers and capacitors) and for many other commercial uses. PCBs were used throughout the world by the millions of pounds. Worldwide concern about PCBs began in Japan in 1968. At that time, PCBs leaked into rice oil in a factory and were later eaten with the oil and numerous harmful effects resulted. Meanwhile in the U.S., releases of PCB had occurred in many waterways including the Great Lakes area. For example, PCBs are a continuing source of low level airborne pollution from Waukegan Harbor, a Superfund site on Lake Michigan. Waukegan Harbor is contaminated with PCBs from releases of large quantities of PCBs from the use of hydraulic systems. Today, PCBs continue to migrate from the harbor sediment, into the water column and into the atmosphere. PCBs were banned by Congress under the Toxic Substances Control Act in 1976. During the period of legal use of PCBs, millions of pounds of the chemical were indiscriminately dumped and measurable quantities of PCBs are found all over the country. About 500 million pounds of PCBs remain in use today in the U.S. and hundreds of millions of pounds are in old disposal sites and ambient in the environment. It is reasonable to expect trace amounts of PCBs to continue to be measured in the air, soil sediment and waterways throughout the U.S. for several years.

While the Agency is not required to collect or maintain information on chemicals used outside U.S. borders, we are aware of efforts by the Mexican government to improve the disposal of hazardous chemicals including PCBs. EPA recently provided technical assistance to the Mexican government which is in the process of permitting a high temperature incinerator (for destruction of PCBs and other hazardous wastes) near Tijuana, Mexico. Similar assistance was provided to the Canadian government for a facility in the province of Alberta. Consequently, measures are underway to reduce pollution sources outside the U.S. and the U.S. EPA is providing support in the form of technical assistance.

In a January 1989 letter, EPA said “currently available data on inputs or loadings of toxics to the Great Lakes are limited and based primarily on a few research studies. The results of these studies ... indicate that the atmosphere may be a major source of input for toxic chemicals such as PCBs and DDT to the Great Lakes. Since these chemicals have been banned in the United States, their source to the atmosphere is unknown.”

Atmospheric deposition of toxic chemicals is also suspected of contributing to population declines in several species of Great Lakes wildlife, including bald eagles, osprey, otter, salmon, and trout.

Past regulation of hazardous air pollution emissions from industrial sources

As noted, section 112 of the 1970 Clean Air Act specifies that EPA must list air pollutants that cause or contribute to death or serious illness. Section 112 then requires EPA to establish emission standards for such hazardous air pollutants at a level that provides “an ample margin of safety to protect the public health.” As interpreted by the courts, EPA may consider costs in determining what is an “ample margin,” but not in determining what is a “safe” level of emissions. The resulting emission standards are called National Emission Standards for Hazardous Air Pollutants (NESHAPs).

Since 1970, EPA has listed only eight substances as hazardous air pollutants (beryllium, mercury, vinyl chloride, asbestos, benzene, radionuclides, arsenic, and coke oven emissions) and has promulgated emission standards for seven of them (no standard for coke oven emissions has been issued). These regulations sometimes apply only to limited sources of the relevant pollutant. For example, the original benzene standard covered just one category of sources (equipment leaks). Of the 50 toxic substances emitted by industry in the greatest volume in 1987, only one—benzene—has been regulated even partially by EPA.

While EPA has taken few final actions to regulate or not under section 112 of the Clean Air Act, EPA has, after Committee hearings in this decade, taken many actions to investigate other pollutants. Many of those actions have not resulted in regulatory decisions. However, some of its actions under other provisions of the Act have coincidentally helped lower toxic emissions. Many toxic emissions are types of VOCs. Thus, in nonattainment areas, these emissions have been reduced as a result of VOC controls required to combat smog formation and should continue to be reduced as a result of title I of this bill. Similarly, emissions of metals like mercury or chromium, which are often emitted in particulate form, have been controlled by particulate controls. EPA has estimated that cancer cases have been reduced by roughly 50 percent since 1970 as a result of VOC and particulate controls. That is important and significant.

Despite these successes under other provisions of the Act, some EPA actions under the Clean Air Act have inadvertently boosted toxic emissions. The phase-out of leaded gasoline reduced gasoline octane levels. In seeking alternatives to regain these levels for performance of vehicles, refiners increased benzene, toluene, and xylene levels in gasoline—all of which have high octane levels, but are also suspected toxic substances.

State and local regulatory efforts.—In the absence of Federal regulations, State and local agencies have exercised responsibility for regulating toxic emissions. This has produced a patchwork of differing standards. According to a 1989 STAPPA/ALAPCO survey “every State has a program to address emissions of air toxics.” The report states:

Air toxics control activity in the States has increased significantly in the past five years. In 1984, only 19 States had programs in place and 23 had plans to develop programs. Today, air toxics control programs for new sources exist in every States in the country.

As indicated ***, the approaches taken by States to control air toxics vary considerably. For example, while all States address air toxics from new sources, 12 accomplish this through regulatory programs, 22 through comprehensive policies and 16 through more informal efforts under their new source review programs. (Three States with "informal" programs have proposed regulations to control air toxics from new sources.) Of the 16 States that control emissions of air toxics from existing sources, 14 do so through regulatory programs and two through comprehensive policies. Additionally, three States have proposed regulations for existing sources and 30 have more informal activities related to existing sources, ranging from case-by-case control of identified problems to planning activities related to the development of a more comprehensive regulatory program. Figure 1 illustrates the distribution of new and existing air toxics sources review programs nationwide.

* * * * *

States use various methods to define the scope of their air toxics programs. The methods identified in the survey included regulation of only a specific list of pollutants (24 States), exemption of certain source categories (10 States), and exemption of sources that emit less than a specific amount of toxics (i.e., below a de minimis emission level) (21 States). Most States (37) also limit the scope of their program by addressing a limited number of existing sources or source categories, or by addressing existing sources only on a case-by-case basis as problem sources are identified. One State exempts all existing sources from review.

States reported that they use a combination of approaches to regulate air toxics. These combinations vary for sources of carcinogens and noncarcinogens. For sources of carcinogens, the approach most frequently identified was one that combined control technology requirements, acceptable ambient levels, and risk assessment. For sources of noncarcinogens, the acceptable ambient levels approach was cited most frequently.

States reported that the primary method for incorporating both new and existing sources into their air toxics control programs is through the State's permitting processes.

Only 18 States have programs of any kind for the regulation of toxic emissions from existing sources.

Hazardous air pollution emissions from area sources

"Area sources" are stationary air toxic sources that are not major sources of emissions of toxics listed in the bill.

EPA and the States have in general taken few actions to control toxic emissions from area sources directly. For instance, no regulatory controls have been imposed on chromium emissions from electroplating operations or on emissions from solvent use and degreasing which might be considered area sources under the bill.

In certain cases, controls on toxic emissions from area sources have resulted indirectly from controls on criteria pollutants. For instance, "stage II" vapor recovery systems required by the States at gas stations, which are required in certain ozone nonattainment areas, help control toxic emissions from gasoline vapors. Another example is woodsmoke emissions from new wood stoves. EPA has acted under section 111 of the Clean Air Act to promulgate new source performance standards for new wood stoves that limit particulate emissions.

Accidental releases of hazardous air pollutants

The discussion about accidental releases occurs in the discussion of the need for legislation.

SECTION-BY-SECTION ANALYSIS

Section 301. Technology based standards for hazardous air pollutants

Title III replaces the existing provisions of section 112 of the Clean Air Act and establishes a new program for control of hazardous air pollutants.

Definitions.—New Section 112(a) includes definitions for several terms as used in this title.

“Major source.”—This is a stationary source or group of stationary sources located within a contiguous area and under common control that emits more than 10 tons per year (tpy) of a single, listed pollutant or 25 tpy of a combination of listed pollutants. For radionuclides, the Administrator will define by rule major sources by regulation, considering radiation dose. For purposes of the definition, all emissions of listed pollutants, are counted from a group of sources within a plant boundary (contiguous property under common ownership). This is to assure that emissions from the facility as a whole are adequately controlled.

The Administrator has discretion to define major source as one emitting less than 10 tpy of a single listed pollutant or 25 tpy of a combination of listed pollutants based on the potency, characteristics of the pollutant, or other relevant factors, such as persistence of an emitted pollutant.

The determination as to whether a source is a “major source” is based on the emissions of hazardous air pollutants from the source after application of installed controls.

“Area sources.”—These are stationary sources that are not major sources. They are to be regulated by category just as major sources are.

“New source.”—This is a stationary source the construction or reconstruction of which is commenced after proposal of a standard by rule under subsection (d) or (f). The interpretation of “reconstruction” is as current rules provide under section 111(a). Under section 112(a)(3), any source which commences construction or reconstruction after proposal of a MACT standard is considered a new source.

The Committee expects EPA to give builders of new facilities some degree of certainty of the requirements in the final rule and when these requirements will become effective. Therefore, the Committee anticipates that EPA will promptly complete final MACT standards as soon as practicable after the standards have been proposed. This period between proposal and promulgation should not exceed one year. The Committee encourages the Agency to give notice to sources adequate to allow for compliance with new source emission standards which are effective upon promulgation. In addition, if EPA knows that its final rule will differ significantly from the proposed rule, EPA may want to repropose the standard.

“Electric utility steam generating unit.”—A definition for this term is provided for certain fossil fuel fired steam electric units.

Other terms.—“Stationary Source”, “owner or operator”, and “existing source” have the meaning the terms currently have under section 111(a).

In the case of “owner or operator” the term means “any person who owns, leases, operates, controls, or supervises a stationary source.” In the context of enforcement and accidents and even other matters, the Committee is concerned about the extent to which this term may include supervisory or other management people at lower levels (who are often technicians, engineers, and other specialists with some supervisory duties or responsibilities, but not senior management people) and the extent to which there is adequate training and operating manuals for them. The Committee does not want these people to be the focus of enforcement or other activities, when the responsibility should be at higher levels of management.

Hazardous air pollutant list.—A statutory list of hazardous air pollutants is provided in subsection 112(b). There are over 170 chemical names and chemical compounds on the list which was prepared by the Administration. The Committee relies heavily on EPA for this list. EPA says that the criteria used were:

(1) that the chemical is an air pollutant, and (2) that there is the potential for adverse health effects to occur in exposed populations. An air pollutant is defined in Section 302(g) of the Clean Air Act as: “any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product material) substance or matter which is emitted into or otherwise enters the ambient air.”

The Administrator may add a pollutant to the list, on the basis of whether the Administrator determines, in his judgment, that the substance is an air pollutant and that there is sufficient evidence to establish that the pollutant is known to cause or can reasonably be anticipated to cause in humans one or more of the health effects listed in section 112(b)(2)(A) (I) to (V). In determining whether the criteria in subparagraph 112(b)(2)(A) apply, the Administrator is to take into account the potential for the pollutant to bioaccumulate. The Administrator may delete a pollutant from the list if he determines that none of the above criteria apply. The Administrator can act on his own motion to add or delete substances. In cases where the Administrator does not have sufficient information, he is authorized to use any authority available to him under the Act to acquire such information.

Anyone may petition for additions or deletions to the section 112(b) list. The Administrator must act on the petition within 18 months of its receipt by publishing a written explanation of his decision. The petition must include adequate health or other evidence to support it. The Administrator cannot deny a petition solely on the basis of lack of resources or time for review.

Source category list.—Section 112(c)(1) provides that within one year of enactment of H.R. 3030, the Administrator must publish a list of all categories and subcategories of major and area sources subject to regulation under this section. The list shall from time to time, but no less often than every eight years be revised, if appropriate, in response to public comment or new information.

Section 112(c)(2) provides that emission standards are to be established for listed categories and subcategories under subsection (d) (maximum achievable control technology emission standards) pursuant to the schedule outlined in subsection (e).

Section 112(c)(3) provides that EPA must list and designate, based on actual or estimated aggregate emissions of a listed pollution or pollutants, sufficient categories and subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of each listed pollutant are subject to regulation. Motor vehicles and nonroad vehicles are not to be considered area sources for purposes of this section.

The Administrator is authorized to include previously regulated source categories in the subsection 112(c) list.

Under section 112(c)(5)(A) the Administrator may decide not to include a source category or subcategory on the list, or to withdraw a source category or subcategory from the list if, in the case of emissions of carcinogens or possible carcinogens, he makes a determination that no source in the category or subcategory emits such pollutants in quantities that create cancer risks of greater than one in one million to the individual most exposed to emissions of pollutants from such source.

The test for withdrawing a category or subcategory of area sources of carcinogenic emissions from the list of sources to be regulated is the same as the test applicable to major sources, with one exception. By their nature, area sources are small sources that may not pose large individual risks, but do pose significant risks collectively. Therefore, in the case of area sources, the test is not whether individual area sources cause a cancer risk greater than one in one million. Rather, it is whether there is any group of area sources in the category or subcategory that collectively cause a cancer risk greater than one in one million. The Administrator may decide to withdraw a category or subcategory of areas sources only if there is no such group.

Subparagraph 112(c)(5)(B) provides that in the case of hazardous air pollutants that may result in adverse health effects to humans other than cancer, the Administrator may decide not to include a category or subcategory of sources on the list, or to withdraw a category or subcategory from the list, if he makes a determination that no source in the category or subcategory emits such pollutants in a quantity that exceeds a level which is adequate to protect the public health with an ample margin of safety.

In the case of area sources of hazardous air pollutants that may cause adverse health effects other than cancer, the test for withdrawal is the same as for major sources, except that as in the case of area sources of carcinogenic emissions, the Administrator must look at groups of area sources within the category or subcategory. The Administrator may withdraw a source category of area sources from the list of sources to be regulated if he determines that there is no group of such sources that collectively emits hazardous air pollutants above a level which protects public health with an ample margin of safety.

If a pollutant causes cancer and non-cancer effects, the tests of both subparagraphs must be met.

The Administrator may make a determination under paragraph 112(c)(5) on his own motion or on petition of any person. He is to grant or deny such a petition within one year.

Section 112(c)(6) instructs the Administrator to establish a separate category or subcategory for research or laboratory facilities as necessary to assure the equitable treatment of such facilities. A "research or laboratory facility" is defined to mean any stationary source whose primary purpose is to conduct research and development into new processes and products, provided that such source is operated under the close supervision of technically trained personnel, and is not engaged in the manufacture of products for commercial sale in commerce except in a de minimis manner. The Committee added the provisions because of its concern that research and laboratory facilities should not arbitrarily be included in regulations that cover the manufacturing operations.

Maximum achievable control technology emission standards (MACT).—The new section 112(d) provides that the Administrator is to promulgate for listed categories and subcategories standards requiring the maximum achievable degree of reduction in emissions by listed categories of major sources and area sources in accordance with a schedule in subsection (e). The standards that he promulgates must be ones that he determines are achievable through application of measures, processes, methods, systems, or techniques, taking into consideration the cost of achieving the reduction, any nonair quality and other air quality related health and environmental impacts, and energy requirements. In promulgating standards, EPA may distinguish among classes, types, and sizes of sources within a category or subcategory. The reduction strategies may include, but are not limited to, measures to: reduce volume through process change or substitution of material; enclose systems to reduce or eliminate emissions; collect, capture, or treat emissions; utilize work practices that control emissions; or require facility operator training or certification. Combinations of the listed types of measures may be required.

Subsection (d)(2) provides that MACT standards shall not in any way compromise any patent, trademark, or confidential business information. In determining whether such rights would be compromised, the Administrator must apply the standard in section 114(c) for protection of trade secrets. Nothing in paragraph (d)(2) is intended to provide for the suppression of records, reports, or information that would be available to the public under section 114(c).

In the determination of MACT for new and existing sources, consideration of cost should be based on an evaluation of the cost of various control options. The Committee expects MACT to be meaningful, so that MACT will require substantial reductions in emissions from uncontrolled levels. However, MACT is not intended to require unsafe control measures, or to drive sources to the brink of shutdown.

Section 112(d)(3) distinguishes between new and existing sources in determining MACT. This is an important distinction because the universe of existing sources in a category or subcategory may be very large and diverse. It provides that in establishing section 112(d) MACT standards for new sources in a category or subcategory listed under section 112(c), the maximum achievable reduction in emissions that is deemed achievable shall not be less stringent than the emission control

achieved in practice by the best controlled similar source in the same category or subcategory. For existing sources, the maximum achievable reduction in emissions may be less stringent than for new sources in the same category or subcategory, but shall be at least as stringent as the emission controls achieved in practice by the best controlled similar sources, as determined by EPA. Consistent with the MACT requirements in the first two sentences of paragraph (3), EPA is to take into account energy, environmental impacts, economic impacts, and other costs as well as any other factors as the Administrator identifies by rule.

Thus, in either case, as EPA searches to determine the best controlled “similar sources” in a category or subcategory these factors must play a role in determining the degree of stringency and the similar sources. The word, according to a dictionary definition, “similar” means “showing some resemblance; *** alike though not identical.” This requires EPA to ascertain if the sources in a category or subcategory are similar to the “best controlled” existing or new source. There may be important differences or characteristics. The physical characteristics and type of operation of the facility may, in fact, distinguish the sources and demonstrate that, in fact, they are not or are similar. In addition, EPA has to consider the above statutory factors, including costs, in determining stringency and similarity.

The MACT provision in the bill gives the Administrator discretion in categorizing and subcategorizing facilities for regulation under subsection (d).

In some instances, there may be no source in the category or subcategory with a level of control as stringent as MACT. In this situation, section 112(d)(3) provides that the Administrator may establish MACT standards without regard to the performance of similar sources. Thus, if EPA cannot find a similar new or existing source that employs controls reflecting MACT, EPA is authorized to establish MACT that meets the subsection's requirements without regard to the performance of similar sources.

Nothing in paragraph (3) is intended to provide that the MACT standard for existing sources necessarily requires achievement of the lowest achievable emission rate (LAER) as required in Part D. Whether compliance with LAER is required for existing sources depends on whether the Administrator concludes that such level of emission control is consistent with the requirements of this subsection.

Finally, the term “achieved in practice” does not necessarily mean standards set forth in permits.

Controls under subsection 112(d) for area source categories and subcategories may require the use of generally available control technologies or management practices by sources to reduce emissions, as elected by EPA, in lieu of MACT and the residual risk provisions of subsection (f). The Committee, in establishing the area source provisions of this section, has given EPA discretion to use this standard in all appropriate cases. The Committee recognizes that this is an important option for area sources.

Standards for radionuclides shall be set based on radiation dose.

MACT standards are effective upon promulgation. Existing sources are required to be in compliance with such standards on a date required by the Administrator within three years of the date of promulgation.

Schedule for standards.—The Agency is directed in newsection 112(e) to promulgate standards under subsection (d) for source categories and subcategories listed under subsection (a). The required schedule for standards will be as follows:

- 10 source categories and subcategories within two years of enactment;
- 25 percent of listed categories and subcategories within four years of enactment;
- 50 percent of listed categories and subcategories within seven years of enactment; and

All listed source categories and subcategories within 10 years of enactment.

Categories and subcategories listed after publication of the initial list required under paragraph 112(c)(1) are to be promulgated within 10 years of enactment, or within two years of the date on which such category or subcategory was listed, whichever is later.

It is important that the Administrator make reasonable and measurable progress regulating all source categories. Such a requirement provides guidance as to an appropriate schedule for regulating all source categories. The Committee would expect EPA to phase in MACT standards to allow sources subject to those standards to allocate their resources in the most effective way.

Section 112(e)(2) provides that the priority of the source categories to be regulated are to be determined by considering three listed factors: (1) The quantity and location of emissions subject to section 112 that each category or subcategory will emit; (2) the known or anticipated adverse effects of the pollutants on public health; and (3) the efficiency of grouping categories or subcategories by pollutants emitted or processes or technologies used. The Administrator should regulate first those categories or subcategories that he determines, based on the listed factors, present the greatest threat to public health.

Residual risk.—Subsection 112(f)(1) provides that within eight years of enactment of these amendments, the Administrator is to investigate and report to Congress on: (A) methods of calculating risks of public health remaining or likely to remain after the application of MACT standards under subsection (d); (B) the public health significance of such remaining risk and the technologically and commercially available methods and costs of reducing such risk; (C) the actual health effects with respect to persons living in the vicinity of the sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assessment methodologies or other health assessment techniques, and any negative health consequences to the community of efforts to reduce residual risks; and (D) recommendations as to legislation regarding such risks. The Administrator must consult with the Surgeon General and must provide for public comment. There should be ample opportunity for public input.

The Committee expects that based on this study, and the more extensive information that will be available concerning the risks remaining after implementation of MACT requirements, Congress will be able to better consider the need for further amendment of this section regarding the control of residual risks. Congress might decide that an amendment is necessary or might decide otherwise.

In recommending legislation regarding residual risk, EPA should evaluate the most appropriate method for measurement of risk to public health for regulatory purposes, considering such alternative approaches as the range of risks, the total number of health effects avoided, reductions in the number of persons exposed at various levels of risk, the incidence of cancer, other public health factors, and the lifetime risk of cancer (or other effects) to the hypothetical or actual maximally exposed individual. As part of this investigation, the Administrator should weigh the appropriate role of other factors besides public health risk, including the costs and technical feasibility of controls.

Under paragraph 112(f)(2), if Congress has not acted on any EPA recommendation in the study under paragraph (1), the Administrator is required within eight years after promulgation of subsection (d) standards for each category or subcategory of sources, to promulgate standards for such category or subcategory in accordance with section 112 of the Clean Air Act as it was in effect prior to enactment of H.R. 3030. Such promulgation in each case is dependent on the Administrator's judgment as to whether promulgation is required in order to provide an ample margin of safety to protect the public health in accordance with section 112 as in effect prior to enactment of these amendments. While the Committee wants EPA to exercise this judgment under current law, it is not by this action continuing those provisions, except for these limited purposes. In the case of categories or subcategories for which standards under subsection (d) are required to be promulgated two years after enactment, the Administration shall have nine years to determine whether such standards are required under this subsection and, if so, to promulgate them. The additional one year for the first group of categories and subcategories subject to the subsection

(d) standards is provided to assure that Congress has ample time to take legislative action before the standards provided under paragraph (2) are imposed.

Paragraph 112(f)(2) also provides that nothing in subsections (c)(5) or (g)(1)(A) of these Amendments is to be construed to affect or apply to EPA's interpretation of section 112 as in effect prior to enactment of these amendments.

Emission standards promulgated under section 112(f) are to be effective upon promulgation. Emissions in violation of such standard from any stationary source are prohibited, except that in the case of an existing source, the standard shall not apply until 90 days after its effective date, and the Administrator may grant a waiver allowing up to two additional years after the effective date for the source to comply if he finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

Alternative emissions limitations.—In new section 112(g), a State with a program approved under Title IV may issue a permit that authorizes a source to comply with alternative emissions limitations in lieu of standards under this section if the source meets specified requirements.

Section 112(g)(1)(A)(i) provides that, in the case of carcinogens, a major source may be permitted to comply with alternative emission limits if the owner or operator presents sufficient evidence to demonstrate that under the alternative limits emissions of listed hazardous air pollutants from the source do not cause a lifetime risk of cancer greater than one in one million to the actual person who is most exposed to such source.

Section 112(g)(1)(A)(ii) provides that, in the case of hazardous air pollutants which may result in adverse health effects other than cancer, a major source may be permitted to comply with alternative emission limits if the owner or operator presents sufficient evidence to demonstrate that emissions under the alternative limits do not exceed a level which is adequate to protect public health with an ample margin of safety.

Section 112(g)(1)(A) (i) and (ii) establish similar procedures for granting alternative emissions limitations to area sources. In the case of area sources, however, there must be a demonstration that the emissions from a group of area sources in the same category or subcategory in the relevant area do not cause a cancer risk to the most exposed actual person of greater than one in one million or, in the case of pollutants with adverse effects other than cancer, do not exceed a level which is adequate to protect the public health with an ample margin of safety. The area source test recognizes that in many instances the health threats from area sources derive from the aggregate emissions of numerous area sources, not from the emissions of individual sources by themselves.

A State with an approved program may also authorize alternative limitations in two other cases. The first is when any existing source shows that it has achieved a 90 percent emissions reduction of hazardous air pollutants (or a 95 percent reduction in the case of particulates) prior to proposal of a standard under subsection (d). The emissions reduction must be determined with respect to verifiable and actual emissions on an annual average basis in a representative year not earlier than calendar year 1987. Such alternative emissions limitations may be permitted in lieu of those required under a section 112(d) standard for a period of five years from the otherwise applicable compliance date, after which time the source must comply with the subsection (d) standard.

The purpose of this provision is to encourage early reductions in emissions of hazardous air pollutants. The standard-setting process under Section 112, even considering the impetus provided by this legislation, is time-consuming. It takes time for the government to set standards, and additional time for industry to make the process and plant modifications which are necessary to come into compliance. Any emission reductions obtained after the base year, but prior to proposal of the applicable section 112(d) standard, are creditable against the 90 percent reduction (95 percent in the case of particulates). Owners and operators should have an incentive to use this option because it allows them greater flexibility to choose the means by which they will reduce their air toxic emissions and to make those reductions without waiting for prescribed standards and regulatory

schedules. Clearly, early reductions achieved before emission controls are required by MACT will benefit the environment and communities near the facilities that make early reductions. In the administration of this provision, EPA thus should strive to encourage companies to take advantage of this incentive to reduce emissions early.

The alternative emission limitation for early reductions is also available in a narrow circumstance for emission reductions achieved after proposal of a MACT standard. Paragraph 112(g)(5) provides that if the early reductions will be achieved by January 1, 1994, the source may be granted an alternative emission limitation, provided the source makes an enforceable commitment to achieve the required early reductions before the proposal of the regulations. The enforceable commitment that must precede proposal of the regulations must be enforceable to the same extent as a regulation under section 112.

Section 112(g)(1)(C) requires the Administrator to promulgate regulations to carry out the provisions of Section 112(g). It is extremely important that EPA promulgate this guidance as quickly as possible, because the first MACT standards will also be issued no later than two years after enactment. In addition, the Committee expects that the permitting authority will act promptly on any requests for such alternative emission limitations, so that these sources can prepare for compliance, if necessary.

An existing source may also be allowed five years to comply with subsection (d) standards where the source has achieved a level of emission reduction which complies with the best available control technology, as defined in section 169, or the lowest achievable emission rate, as defined in section 171, and the source has achieved such standards within five years prior to proposal of the subsection (d) standard. The permit may authorize the limitations associated with those controls in lieu of compliance with section 112(d) standards, for a period of five years after the promulgation of the 112(d) standards.

The Administrator is also to publish regulations establishing methods for assessing the significance of public health risks, and methods for evaluating evidence presented by those sources seeking alternative emission limits under this subsection. Any demonstration used to support a showing under section 112(g)(1)(A) must comply with such regulations. Section 112(g)(4) provides that any stack height credit used in such modeling must be based on the lesser of the actual stack height of the source as it existed on January 1, 1989, or the stack height credit as provided in regulations issued by the Administrator.

To assure that alternative limitations are consistent with the requirements of section 112, section 112(g)(7) provides that no alternative emission limitation under section 112(g)(1) shall take effect until it is approved by the Administrator.

If the State in which a source is located does not have a program approved under Title IV, the Administrator may grant any extensions authorized under this subsection for such source.

An evaluation of the cancer and non-cancer health effects in the case of a major source or area sources emitting more than one hazardous air pollutant, must consider the available information on the effects of all such pollutants, taking into account limitations of risk assessment methodology.

Preconstruction and operating requirements.—Section 112(h) prohibits construction of a major source not in compliance with an applicable emission standard or limitation in effect under section 112(d), (f) or (g). The section also prohibits sources subject to such standard or limitation to operate except in compliance therewith.

Technical assistance.—Section 112(i) directs the Administrator to establish an information clearinghouse and to provide technical assistance for State and local agencies. EPA is also required to use its broad authority under section 103 to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks.

Presidential exemption.—Section 112(j) retains present law provisions that for reasons of national security the President may exempt any source from requirements of this section for a renewable period of two years.

Saving provision.—Section 112(k)(1) preserves the effectiveness of regulations issued under the superseded section 112 language. Regulations under court review on the date of enactment shall be reviewed under the prior language of 112. A standard remanded to the Agency may be considered by the Administrator under terms of either the prior or the amended section.

Section 112(k)(1) also requires the Administrator to review the regulations issued under the superseded section 122 within ten years after enactment and, if appropriate, to revise those regulations to comply with the requirements of subsection 112(d).

Section 112(k)(2) provides that, notwithstanding paragraph (1), no new standards are to be established for radionuclide emissions from elemental phosphorous plants, grate calcium from elemental phosphorous plants or phosphogypsum stacks and subcategory of the foregoing. Section 112 as in effect prior to enactment is to remain in effect for those categories or subcategories for which standards are not to be established under the Clean Air Act Amendments of 1990.

Section 112(k)(3) states that certain actions are not final agency action for purposes of judicial review.

Electric utilities.—Under new section 112(l), the Administrator is directed to perform an assessment of the hazards to public health which may reasonably be anticipated to result from emissions listed under this section from certain electric utilities after imposition of the requirements of this Act. The Administrator is directed to report the results of this study to the Congress within three years after enactment. The Administrator shall develop and describe in his report to the Congress alternative control strategies for emissions from affected sources warranting regulation under this section. The Administrator is required to regulate such sources if he finds such regulation appropriate and necessary after considering results of the study.

Accident prevention, detection and response.—Section 112(m) directs the Administrator within three years of enactment to promulgate, in consultation with the Secretaries of Transportation and Labor and taking into consideration the laws they administer, regulations to provide, to the greatest extent practicable, for the prevention and detection of accidental releases into the ambient air. The regulations must also provide for effective responses to such accidental releases by regulated sources. The regulations are to take effect three years after promulgation.

The Administrator is to promulgate a list of significant air pollutants which may reasonably be anticipated to cause serious adverse effects in the event of an accidental release. Such list shall include the substances listed as extremely hazardous substances under the Superfund Amendments and Reauthorization Act of 1986 and may be modified by EPA. The agency may add a substance only if EPA determines that it may reasonably be anticipated to cause serious adverse safety effects.

When the Administrator lists a pollutant for regulation under the accident provisions, the Administrator shall establish a reasonable minimum threshold quantity for the pollutant, taking into account toxicity, dispersibility, combustibility, or flammability and the likelihood of an accidental release. The minimum quantity should be a quantity which, if accidentally released into the ambient air, would not pose a serious adverse effect in the concentrations in which it would likely be present in the ambient air.

This subsection makes it clear to EPA that it only replies to releases to the ambient air and that EPA must use the expertise of these other agencies.

The Committee is aware of the concerns expressed by the Committee on Education and Labor about similar provisions in the Senate. Indeed, in a March 28, 1990 letter to the Committee, Chairman Joseph M. Gaydos said:

I am referring to Sec. 304 in title III of S. 1630 which adds a new section to Part A of Title I of the Clean Air Act. This new section—sec. 129(e)—creates a Chemical Safety and Hazard Investigation Board within the Environmental Protection Agency. Among its duties, this Board shall “investigate ... any sudden accidental release involving the production, processing, handling, or storage of chemical substances resulting in a fatality, serious injury, or substantial property damage.”

It is not clear to me whether this Board will be authorized to investigate only those incidents that affect persons or property outside of the chemical facility itself or if such investigations could be construed to apply to in-plant accidents involving employees as well.

If it is the latter, and as I say, it is not clear as presently written, then I must register my concerns with you, as the Chairman of the Committee of reference, and, in the event S. 1630 is sent to the House with the inclusion of the present language, with the Speaker.

My reasons are quite simple. First, when we passed the Occupational Safety and Health Act of 1970, we addressed the issue of employee safety and health by creating an agency, the Occupational Safety and Health Administration (OSHA), within the Department of Labor. Furthermore, while we may be critical of OSHA and its efforts, we cannot expect any improvement if we undermine its jurisdiction.

More to the point, some three years ago, OSHA initiated a special emphasis program for the chemical industry which resulted in full inspections of more than 20 chemical operating facilities across the country. At the conclusion of the program in 1988, OSHA began developing a specific inspection program for just that industry. A rule to create "Process Hazards Management of Highly Hazardous Chemicals" is underway.

With that said, let me commend you for your approach to that same issue. ~~Sec. 301 of Title III of~~ H.R. 3030, which would amend Sec. 112(m) of the Clean Air Act, you provide that the "Administrator of the EPA, in consultation with Secretaries of Transportation and Labor and the laws administered by them," develop rules and regulations to prevent and detect accidental releases of air pollutants into the ambient air.

Your approach is a much more considered one which I can support because it recognizes the jurisdictional responsibilities of the several agencies involved in protecting the public as well as those men and women most likely to suffer, the workers.

In addition, the Department of Labor expressed concern about the new regulatory authorities to EPA "without recognition" of the Occupational Safety and Health Administration's (OSHA) role in the prevention of chemical accidents." They referred us to section 4(b)(1) of OSHA's Act and said:

In effect that section preempts OSHA's regulatory and enforcement authority when another agency has authority over safety and health in the workplace and has regulations in effect addressing safety and health in the workplace. Preemption of OSHA because of another agency's regulatory authority and action is determined by the Courts usually because an employer has raised the issue as a defense to an OSHA citation.

Clearly, this Committee wants to completely avoid that possibility. We will continue to work with Chairman Gaydos and the Chairman of the full Committee, Congressman Augustus Hawkins.

Protection of the Great Lakes and the Chesapeake Bay.—Under section 112(n) the Administrator is directed to investigate the sources of atmospheric deposition of hazardous air pollutants and their transformation products into the Great Lakes, the Chesapeake Bay, and their tributary waters, and to evaluate the adverse effects to human health and the environment caused by such deposition. This assessment is to include consideration of the tendency of such pollutants to bioaccumulate, and consideration of the effects associated with indirect exposure pathways. The Administrator is to report to Congress on the results of such investigation and evaluation within two years of enactment, after providing for public input.

The study should consider in part monitoring data from the Great Lakes Integrated Atmospheric Deposition Network (the air toxics portion of the Great Lakes Atmospheric Deposition Monitoring Network) established as part of the Great Lakes International Surveillance Plan of Annex 11 of the 1987 Great Lakes Water Quality Agreement with Canada. These monitoring data should consist of dry and wet condition data collected from at least one monitoring station per lake, and be compatible

with databanks of the International Joint Commission and the States of the region. The study should also include data from sampling biota to establish food chain effects.

In the report to Congress the Administrator shall determine whether other provisions of section 112 are adequate to prevent serious adverse effects to human health, and serious or widespread environmental effects, including effects from indirect exposure pathways, associated with atmospheric deposition of hazardous air pollutants on the Great Lakes, the Chesapeake Bay, and their tributary waters. Within three years of enactment of these amendments, based on the report under this subsection, the Administrator is to promulgate, in accordance with this section, such further emission standards or control measures as he determines may be necessary and appropriate to prevent such effects to human health or the environment, including effects due to bioaccumulation and indirect exposure pathways.

This subsection is intended to provide the Administrator with responsibility and authority to promptly evaluate the sufficiency of the regulatory structure provided under section 112 for protection of the Great Lakes, the Chesapeake Bay, and their tributary waters, giving special emphasis to the effects associated with the bioaccumulation of hazardous air pollutants.

Technical assistance for small sources.—Section 112(o) directs the Administrator and States with permit programs to supply technical assistance and information to area sources and stationary sources that are not major sources, including help in meeting applicable standards and obtaining needed permits. The provisions complement title IV provisions of this nature.

Hydrofluoric acid.—Within three years of enactment, the Administrator is directed in subsection 112(p) to complete a study of the net benefits to public safety, human health, and the environment from the use by oil refineries of any substance or process which is an alternative to hydrofluoric acid. The principal competing alternative to hydrofluoric acid is sulfuric acid. Sulfuric acid poses a substantially reduced threat to human health in the case of an accidental release, but it may pose offsetting risks to health as a result of sulfur oxide emissions produced during its regeneration and recycling. A major purpose of the study is to evaluate whether these new emissions are less or more of a danger to human health than the acute danger to human health hydrogen fluoride poses.

As part of the study, the Administrator must consider several factors. One factor is the loss of life or damage to health in the event of a reasonable worst-case accident. To assess this factor, the Administrator should determine what would be a worst-case accident and then evaluate the loss of life or damage to health that could reasonably be expected from such accident. The Administrator should also analyze the customary air and water emissions from the use of hydrofluoric acid or an alternative. This will require the Administrator to assess the impacts of these emissions when refineries operate in compliance with the applicable provisions of this Act and the Clean Water Act. Finally, the Administrator must consider the impacts of a worst-case accidental release of hydrofluoric acid. If the Administrator determines that it is likely that such a release would pose a risk to human health or the environment, the Administrator must also consider whether the use of alternatives would pose similar risks.

If the Administrator determines that there is an alternative that provides a net benefit to public safety, human health, or the environment, he shall promulgate regulations within 15 months requiring each oil refinery in the nation to convert to such alternative. In a situation where local meteorological or environmental factors warrant special consideration, the Administrator may make differing determinations on a site-specific basis. The size of the population at risk is not to be considered in making a site-specific determination, since it is the Committee's intent that all local populations receive the greatest protection possible.

Nothing in this subsection is intended to preempt State or local authority to act to regulate hydrofluoric acid.

Mickey Leland Urban Air Toxics Research Center.—Section 112(q) of the Committee's reported bill authorizes the creation of a non-profit public/private research facility to be known as the Mickey Leland Urban Air Toxics Research Center and to be located in Harris County, Texas for the purpose of studying the potential community based health effects and risks associated with exposure to air toxics. Findings from the Center's studies may be useful in the formulation of future air quality regulations and standards designed to prevent community health problems determined to be caused by emissions of toxic compounds.

Additionally, the Center would contract for, collect and assess supplemental studies undertaken at other geographic sites within the United States. A nine-member Board of Directors, selected by the President, the Senate Majority Leader and the Speaker of the House of Representatives based on educational and professional experience in such matters as public health, environmental pollution and public administration, shall govern the Center with the advice of a thirteen-member Scientific Advisory Panel comprised of eminent members of the scientific and medical communities. Both federal and non-federal funding of equal proportions will be used to establish and support the Center.

Oil and gas wells.—Section 112(r) provides that emissions from oil and gas wells are not to be aggregated for purposes of this section. The section also provides that if oil and gas wells are listed under this section, the Administrator shall determine whether emissions from any such wells present a cancer risk greater than one in one million to the actual most exposed individual or, in the case of pollutants with adverse effects other than cancer, exceed a level which is adequate to protect public health with an ample margin of safety.

Many oil and gas wells, and associated equipment and gas processing, may have generally low emissions of air toxics. Many such operations are also located in remote areas, with wells and equipment widely dispersed geographically, rather than concentrated in a single area. These wells may not present a significant risk to human health, and for this reason this source category may not need to be a listed category designated for regulation. However, if any oil and gas wells are listed as a source category or subcategory, the Administrator is instructed to determine if any well (or associated equipment) presents a lifetime risk of carcinogenic effects greater than one in one million to the most exposed actual person (as referred to in subsection (g) (1)(A) which regards Alternative Emissions Limitations). This requirement is somewhat similar to the provision that allows the Administrator not to list a source category when he determines that no source in the category would cause a lifetime risk of carcinogenic effects greater than one in one million to the most exposed individual in the population. Also, the provision for Alternative Emissions Limitations allows sources, on a case-by-case basis, to comply with alternative emissions limitations if it is demonstrated that lifetime risk to the most exposed actual individual does not exceed one in one million.

Coke production technology study.—Subsection (s) requires that the Administrator and the Secretary of the Department of Energy jointly undertake a 6-year study to assess emission control technologies for coke ovens and to assist in the development of new technologies for reducing emissions from coke oven facilities. The focus of the study is to identify methods for reducing emissions from coke ovens. It is not the intent of the Committee that the Administrator delay the issuance of MACT standards until the completion of the study. Five million dollars is authorized for each fiscal year 1991 through 1996 for the program under this subsection.

It is important to not unique circumstances that relate to coke ovens and their ability to meet standards for maximum achievable control technology (MACT).

For most sources of toxic air pollutants, emissions emanate from a duct or stack which is discharging pollutants from a process. The particular constituent of concern can be identified and measured, and a determination can be made as to the appropriate control device that can be installed to control that pollutant to a specified level for a known cost. In the case of coke oven emissions, it is exceedingly difficult to assess the problem in this manner or to determine an appropriate level of technology.

In the first instance, coke oven emissions are very difficult to quantify. Emissions occur as a result of leakage from oven doors, charging ports, and oven offtakes. As a result, emissions are not confined in a duct or stack where emissions can be readily measured. As such, emissions are quantified in terms of the percentage of doors, lids, or offtakes which are leaking. Small leaks are counted the same as large leaks, and it is difficult to attribute a performance level to the number of leaks without considering the magnitude of leaks.

In addition, the most toxic component of coke oven emissions is the “benzene soluble organic” fraction of the particulate emissions, which may or may not be proportional to the visible particulate emissions which are reflected by a leakage standard.

Unlike a standard for another pollutant or process, the actual emission of the toxic component is not directly related to the performance standard.

Moreover, the degree to which coke oven leakage occurs can be highly dependent upon the physical condition of the ovens, their design, operating conditions, and work practices. Coke oven batteries are refractory structures which are exposed to highly variable temperatures and pressures over several decades of operation. The brickwork is prone to cracking which leads to leakage which may become more acute with the age of the battery, particularly near oven openings such as charging hole lids or doors. Rapid heating and cooling and physical abuse also may cause warpage of metal castings and the fabricated hardware that form these openings. Production fluctuations or idling of facilities due for various reasons often influence the condition of the brickwork. The types of coal and the type of coke produced also influence oven pressures, heating rates, and other operating practices that vary from battery to battery and from time to time. Because of the higher pressures and thermal stresses on taller ovens, door leakage has often been more difficult to achieve.

The operating capacity of a battery and oven size may also be important factors. For example, there may be significant differences between the size of a battery or coke plant producing blast furnace coke for an integrated iron and steel plant and another battery or coke plant producing foundry coke as an independent producer.

EPA has taken the position that a level of control identified in the 1987 NESHAP proposal for coke oven emissions as "LAER plus new doors" is available within the steel industry because several facilities now achieve that level. There is concern among some in industry that coke ovens may not actually be able to attain, on an ongoing basis, these levels. On the other hand, some labor groups disagree.

An August 10, 1989 letter from Administrator Reilly who, in responding to reports from Dr. Graham of Harvard, said:

The study (by Dr. Graham) is correct that over the years there has been substantial effort to reduce both worker exposures to coke oven emissions and to reduce particulate matter emissions from coke ovens into the ambient air. The report is also correct that the requirements included in consent decrees negotiated by EPA and State officials in the mid-1970's were "technology-forcing."

Coke ovens have proved very difficult to control for a number of reasons. First, coke oven technology has evolved very little from the early 1900's and attempting to retrofit emission control on this technology is very difficult. Second, the ovens are operated at extremely high temperatures (900 to 1,100 C). Control equipment needs to be able to withstand these temperatures for extended periods of time. Many control techniques which have looked promising have been unable to withstand these temperatures. For example, now the most significant source of emissions from coke ovens is from around the doors on the sides of the ovens. These doors need to be able to be removed at the end of every coking cycle so that the coke can be "pushed" from the ovens. Air must be prevented from leaking into the ovens by maintaining a positive back pressure of about 10 mm water. If this pressure is not maintained, air will enter the ovens from around the edge of the doors and there will be a fire in the ovens which can cause substantial damage to the battery. Control of door emissions has entered on "self-sealing" doors which rely on gaps being sealed by the condensation of tars in the escaping gases. However, these doors must be cleaned completely after each coking cycle and must be carefully placed on the ovens so as to not damage the seals. Inadequate cleaning or damage to the seals significantly affect the performance of the doors in reducing emissions. Requirements that would reduce particulate emissions low enough that the ambient air quality standard for particulate matter was met invariably had to be technology-forcing.

* * * * *

The report is correct that substantial progress has been and continues to be made in reducing emissions from coke ovens. This progress can be credited to the "technology-forcing" consent decrees and responsiveness on the part of the industry to continue to look for new ways to reduce emissions. There also have been two studies jointly funded by the American Iron

and Steel Institute and EPA to investigate new technologies. While not every effort has proved fruitful, a great deal has been accomplished over the years in reducing coke oven emissions.

In any event, in the 1987 rulemaking, EPA basically established one category for coke ovens. (There is a distinction between 4 meter and 6 meter tall batteries; otherwise, a single category is assumed.)

Thus, there are a broad range of factors that can influence coke oven emissions and their control. This study will consider all of these matters and it should be helpful in dealing with this difficult, long-standing problem of reducing emissions from coke oven facilities. The Committee expects EPA to undertake the study promptly and to ensure broad participation by industry, labor and others.

New section 112(t) of the Act requires the Comptroller General to submit a report to Congress on the costs and benefits associated with certain aspects of Title III of the bill. On January 1st following the third year after enactment, and annually thereafter, the comptroller General is to prepare a report on the incremental human health and environmental benefits and incremental costs associated with compliance with the MACT standards prescribed by this bill. The Comptroller General is to consult with specified agencies in preparing the required annual report. The report shall include information on a broad range of potential positive and negative effects, economic and environmental, caused by the MACT standard specified for particular source categories and subcategories.

It is important that Congress have the benefit of this important information on an ongoing basis in carrying out its oversight and legislative responsibilities after the enactment of this bill. The hazardous air pollutant provisions of Title III have the potential to do great good in terms of protecting public health, but harm could result in terms of lost jobs and constraints on competitiveness. The Committee expects these reports will provide timely and objective information to help it assess the adequacy, effectiveness, benefits and costs of the new hazardous air pollutant provisions of the Clean Air Act.

Title IV: Permits

INTRODUCTION AND BACKGROUND

H.R. 3030 adds a new Title IV to the Clean Air Act recommended by the President establishing for the first time a comprehensive and uniform operating permit program for certain stationary sources. In recommending this title, the Administration provided this general overview:

This title requires States or interstate agencies to submit to the Administrator comprehensive permit programs under State law or under interstate compacts for regulating stationary sources that are subject to one or more of the regulatory programs under the Act: SIP requirements, new source performance standards, emission standards for hazardous air pollutants, PSD and nonattainment new source review, and acid deposition controls under the new Title V. This comprehensive program is patterned generally after the program that now applies to point sources of water pollution under the Clean Water Act. EPA must issue regulations governing the programs, including requirements for adequate State statutory authority and permit fees. The permit fees are required to recoup all direct and indirect costs of administering the air pollution control program related to the permitted sources, including the portion of such costs as emission and ambient monitoring, modeling and preparation of generally applicable regulations and attainment demonstrations that may be attributed to the permitted sources. A State is required to submit a permit program to the Administrator not later than three years after enactment. If the State fails to submit a completely approvable program, the Administrator has discretionary authority to apply the sanctions that generally apply to failure to submit SIPs, or to promulgate a complete or partial federal permit program for the State. The Administrator may also withdraw approval, or apply sanctions, if a State fails to implement its program.

The Committee notes the Administration's comment that the permit program is "patterned generally" after the permit program for "point sources of water pollution under the Clean Water Act." As a general statement that is helpful. But there are differences

between the two programs and they must be recognized. For example, under the Water Act the discharge occurs into a navigable waterway, while under the Clean Air Act the pollutant is emitted into the ambient air which offers a broader geographic area than a waterway. This is particularly true in light of the new definitions of "major sources" under sections 112 and 302, and in Titles I and V. Thus, the number of operating permits, particularly for rather small sources, may be significant. The Administration has not provided any estimates of how many sources may be subject to Title IV.

The Committee also observes that there are already several permit programs under the Clean Air Act. Some are now administered by States. According to an August 15, 1989 letter to the Committee, EPA says that almost all States "have approved new source review permit programs as required under sections 110 and 173" of the Act. Also, "most" States "have either adopted acceptable permit programs" pursuant to PSD requirements "or have been delegated the PSD permit review program under EPA's regulation."

It is unclear how many States have operating permit programs like the requirements of this title. Once H.R. 3030 is enacted, those States would, of course, have to conform to the requirements of this title which does not preclude a State from adopting additional requirements regarding permits that are consistent with this title. The Committee observes that sources subject to these permit requirements often compete within the same industry and they are dependent on suppliers that also may require permits. To the extent permit programs differ in stringency or in other ways, advantages or disadvantages for the competitors can be created in rather subtle ways, including the attraction of sources to a State. The Committee wants to see that situation avoided and expects EPA to consider this concern in issuing regulations and in oversight of State or local permit programs.

In addition, EPA told the Subcommittee that as of early 1987, "31 States and at least 26 local air pollution control agencies collect fees." EPA said the funds collected "are retained by the air program in about half the States and 70 percent of the local agencies." In the others, "the money goes to the general fund, some of which may be returned in the form of appropriations."

The State and local air pollution control administration, in an April 1987 report entitled "Air Permits and Emissions Fees," said that not all States with "authority to collect fees actually do so."

The reasons that states identified for not collecting fees include:

The revenue would become part of the state's general fund and not be available to the air agency;

Rules and/or fee schedules have not been adopted to implement permit or emissions fee collection;

The legislature would reduce the agency's appropriation by an amount proportionally to the fee revenue, thereby eliminating any economic benefit to the air agency;

The revenue would be very small compared to the administrative costs, because the maximum allowable fees are low; and

The issuance of permits has always been considered a public service that needed no reimbursement.

H.R. 3030 provides that the fees collected under an approved permit program must be used by the States to cover the reasonable costs of the permit program under this title. The money could not go to general State revenues. The fees are not available to cover other costs of the State agencies. However, nothing in the bill would preclude fees by those agencies. To the extent State law is inconsistent with Title IV, the States would have to make changes to obtain an approvable program.

Under section 110(a)(2)(K), the States are now required to collect fees. But EPA contends that the section "does not provide adequate authority for States to collect fees; specific State legislative authorization is required" and apparently many States have failed to obtain that authority. However, EPA has "not disapproved any" SIP "for failure to include a permit fee program or to charge sufficient fees."

The Title IV operating permitting program is in addition to the above Federally required permit programs.

The Committee notes that Title V also contains some specific provisions regarding permits under this title that relate solely to sources subject to that title. To the extent there is conflict between the provisions of the two titles, the Committee intends that the applicable Title V provisions will prevail for Title V sources.

The Committee understands that in nonattainment areas subject to SIP requirements, an issued permit becomes a part of the SIP as to the particular source.

SECTION-BY-SECTION ANALYSIS

Section 401. Permits

Section 401 adds a new Title IV—Permits—to the Clean Air Act, consisting of new sections 401 through 407.

New Section 401. Definitions.—This section defines the central terms used in this title. These include the terms “major source”, “affected source”, “schedule of compliance”, and “permitting authority”. Other terms are defined by reference to sections 111 and 112 of the Act where they are initially used and defined. The Committee observes that the term “permitting authority” includes local governmental entities. Thus, to the extent that there is a delegation as part of an approved permitting program, to local governmental air pollution agencies, the provisions of this title and the comments herein would apply to them.

New section 402. Permit programs.—First, this section makes it unlawful for a stationary source subject to this title to operate without a permit once a permit program is effective. Second, this section requires States to submit to the Administrator comprehensive permit programs for regulating many stationary sources which must be approved by EPA. It also authorizes EPA to establish an operating permit program.

Applicability. Subsection (a) identifies the sources that are subject to permit requirements under the title. These include sources subject to the following requirements: new source performance standards, emission standards for hazardous air pollutants, prevention of significant deterioration (PSD), nonattainment new source review, and sources related to acid deposition. In addition, all major stationary sources (however, the term is defined throughout the Act) of air pollutants are subject to the permit requirements.

The title gives EPA authority to designate by rule other sources that must have permits. EPA may also exempt by rule one or more source categories from such permit requirements if EPA finds in the rule that the exemption is consistent with the Act's purpose. In both situations, EPA cannot exercise the authority except by rule. Thus, the discretionary authority afforded in both cases would appear limited.

The subsection makes it unlawful for any of these sources to violate the terms of a permit or to operate without a permit (except as may be provided in section 403(d)) after the effective date of any permit program (including a partial or interim program) approved or promulgated by the Administrator.

These are the key provisions of the title. They outline in general what sources are covered and they make it clear that without a permit, the source would be in violation of law and could not operate. They are important provisions.

Minimum elements for an approvable permit program.—Subsection (b) directs EPA to issue regulations within 12 months after enactment establishing the minimum elements of permit programs whether administered by a State or EPA.

These elements must include requirements for permit fees under State law to recoup all reasonable costs of developing and administering the State's air pollution permit program, including the reasonable costs of emission and ambient monitoring, modeling, and reviewing and acting on permit applications. This would include the cost of the small business provisions of this title. The fee program is not intended to be used to cover costs of the administering agency, not related to permits. One objective of the fee is to ensure that the permitting authority has all necessary resources to administer the permit program with the minimum of delay. The Committee expects EPA to periodically audit the State's program, including the fee provisions. EPA's Inspector General should audit any EPA program.

The bill requires a fee of not less than \$25 per ton from all covered sources in the aggregate of each "regulated pollutant" (which is defined) covered by the permit, or another sum set by EPA that adequately reflects the reasonable permit program costs. It is expected that EPA will examine the adequacy of the fee periodically.

Provision is made for EPA adjusting the fee annually using the Consumer Price Index, consistent with the need to cover all reasonable permit program costs. In determining the fee amount, the permitting authority is not required to impose a fee on any regulated pollutant emitted by a source in excess of 4,000 tons per year.

Other listed minimum program elements include:

Requirements for permit applications, including a standardized application form and criteria for determining completeness which determination is a critical element in streamlining the review of, and decision on, permit applications and in providing a basic "checklist" of information needed to facilitate action on applications and compliance plans, including meeting the requirements of section 403(d);

Monitoring and reporting requirements;

Requirements for adequate personnel and funding;

Authority to issue permits (and enforce them) for up to 5 years and include emission limits and other requirements in a SIP;

Authority to terminate, modify or revoke and reissue permits for cause;

Authority to enforce permits, permit fee provisions, and the requirement to obtain a permit;

Authority to ensure that no permit is issued where EPA timely objects;

Providing adequate, streamlined, and reasonable procedures on completeness of applications, on processing applications for public notice, and for expeditious review of permit actions, including initial and renewal applications; and

Authority, subject to section 114(c), to make public the permit application, compliance plan, permit, and monitoring or compliance report.

The Committee notes that some States now issue permits that must be renewed annually. That is not precluded by the bill. However, it is unlikely that each such renewal could go through all of the procedures for the initial permit under this title without applications "pancaking" and causing a backlog or logjam. EPA and the States may want a longer period or find a less burdensome approach, consistent with the bill, for such renewals. As noted, the permit term can be up to five years. Provisions regarding renewals are set forth in Title V for that title and this title.

Because the Committee is uncertain about the magnitude of permit applications likely to be submitted under the bill initially and thereafter in each State or to EPA, the Committee included the directive for EPA and the States to streamline the procedures

so that resources are allocated efficiently and permit applications are acted upon in a timely fashion, particularly in the case of sources not subject to section 403(d).

As noted, the State must have the authority to terminate, modify, or revoke and reissue permits “for cause” in accordance with proper procedures that ensure notice and fairness. “Cause” could include situations where the source failed to comply with a requirement of the permit, deliberately misrepresented a material fact in a permit application or report, operations substantially endanger the public health or welfare, or some other possibility. It should not have to be used too frequently if the permit program is properly administered. The adoption by the Administrator or the State of any significant new rules or standards applicable to the source could also provide “cause” for modifying the terms of the permit to reflect the new rule or standard. Of course, depending on the length of time remaining in the permit term, a permitting authority may defer until the next renewal date.

Single permit.—Subsection (c) provides that a single permit may be issued for a facility with multiple points of emissions which appears quite sensible and should be encouraged.

Submission and approval.—Subsection (d) requires each State to develop and submit to EPA a permit program under State law or under interstate compact not later than three years after enactment that meets the requirements of this title. The program must include a legal opinion that the State or interstate laws provide adequate authority for the program, including the fee provisions and the necessary procedures for issuing and enforcing permits.

EPA has one year to approve or disapprove the program (after notice and opportunity for a public hearing) in whole or in part. EPA is authorized to approve the program if it meets the requirements of the Act, including the regulations under subsection (b). If EPA disapproves in whole or in part, EPA must tell the Governor of any revisions or modifications needed for approval. The Governor then has 180 days after the notice to resubmit the program for approval. If the State fails to resubmit an approvable program, EPA must withhold SIP revisions affecting one, or a small group, of major sources. EPA may also either apply the highway sanction under section 179(b) or promulgate a permit program or partial program.

The Committee notes that section 110(o) of the Act requires that State SIPs must include the establishment of a permit program under this title within four years after enactment or the SIP may not be approvable under Title I. That provision is not intended to give any State more time to submit the program than is provided by this title.

Suspension.—Subsection (e) requires EPA to suspend permit issuance upon notice of approval of a State program. However, the bill provides a transition procedure. EPA would still enforce and administer EPA issued permits until they are replaced by the State issued permit.

Partial permit programs.—Subsection (f) provides that the Administrator may partially approve permit programs covering one of three specific portions of a complete program. Any such partial program must apply all the requirements of that portion. For example, in order to obtain approval of a partial program to control acid deposition, a State would have to show that it had authority to apply to affected sources all the requirements of Title V, but not that it had authority also to apply all requirements of Title I. Similar requirements apply to partial approval of programs applying emission standards under section 112, or programs applying Title I requirements other than section 112. Approval of a partial program would not relieve a State of the requirement to submit a fully approvable program.

Interim approval.—Subsection (f) provides that interim approval, for a period not to exceed two years, is available by rule for programs, including partial programs, that substantially meet the requirements of Title IV, but is not fully approvable. Interim approval would be appropriate if the State permit program complies with the requirements of the title in all but a technical detail. But, interim approval would not be appropriate if the State program fails to incorporate the substance of each of the minimum elements of a fully complying permit program.

Effective date.—The program is effective on approval by EPA.

Administration and enforcement.—Subsection (i) provides that the Administrator may withdraw approval of a permit program, or apply sanctions, or promulgate a program, if a State fails to implement its program. Provision is made for preliminary determinations by EPA by notice which is public. This is an important provision. It is necessary if the permit programs are going to be effective and comply with this title.

New section 403. Permit applications

Applicable date.—Subsection (a) provides that any stationary source required to have an operating permit on the date that the source becomes subject to the applicable permit program and is required to have a permit either the date when the permit program (or partial or interim permit program) is effective, or the date when the source becomes subject to section 402(a).

Compliance plan.—Subsection (b) specifies that the permit program regulations must include a requirement that permit on the date source applications be accompanied with a compliance plan describing how the source plans to comply with applicable requirements of the Act. It shall also include a schedule of compliance (which is a defined term) and a schedule under which the permittee will submit progress reports no less frequently than every six months.

The purpose of the compliance plan is to provide a schedule of reasonable and enforceable measures to be taken to achieve timely compliance with the applicable SIP, emission standard, limitation, or prohibition. The Committee expects EPA, in establishing by rule completeness criteria and procedures for processing applications, that such criteria and procedures will cover these plans as well so as to ensure swift action on the question of completeness of the application (which includes the plan). The Committee again stresses that in all cases EPA rules and the implementation of the permit program should ensure that the permit program is workable and streamlined so as to avoid delay and backlogs of permit applications and burdensome requirements.

The subsection also requires that EPA's rules require that a permittee periodically certify compliance with the applicable permit requirements. The permitting agency has discretion about the frequency of certification. The Committee expects EPA to give guidance in the rule.

The subsection also requires prompt reporting to the permitting authority by the permittee of any permit violation, subject to the constitutional safeguards against self-incrimination. Under this provision, when a permittee has reasonable knowledge of an actual violation, the permittee would presumably be required to report that violation without delay. Of course, the permitting authority will have to set up a reasonable procedure to receive such notice of violations, so there cannot be a dispute later over whether the notice was promptly made and in adequate form. Notice of some violations that may not be significant could perhaps be done by mail, while others may require more immediate and direct notification methods. Again EPA should give guidance in the rulemaking.

Deadline.—Subsection (c) requires that within 12 months a person who owns a stationary source that becomes subject to the permit program must file with the permitting authority the application and compliance plan. The permitting authority may provide a shorter time.

The Committee expects that in the beginning EPA should work closely with all types of business organizations and other affected persons to develop and refine the permit program so source owners are provided with adequate notice of any deadline. Information to source owners through trade publications, seminars, and other means, along with clear, simple, and understandable rules and guidelines can also help to prevent the unwanted result of missed deadlines by many sources and the resulting consequences of being in violation of section 402(a) and unable to operate their factory or business. The States can also help. The Governor's permit program application and pending approval and its effects should be well-publicized, along with the State's requirements for applications and plans, so that the applicant is well-informed and can begin long before the start of the deadline to comply. The Committee expects EPA to work effectively to ensure that the program is workable

Timely and complete applications.—For other than construction permits under section 165, 172, or 173 of the Act, subsection (d) appropriately provides for the continued operation of stationary sources subject to this permit program so long as the applicant timely files an application for a permit with the permitting agency and the application complies with the completeness criteria of the regulations as determined by that agency. The source can continue to operate without the final permit while the permitting authority acts on the application, so long as delay, if any, is not due to the applicant's failure to submit relevant information required or requested to process the application on a timely basis.

This provision is very important because, as we have observed, section 402(a) makes it unlawful for any person to operate an applicable source without an operating permit once the applicable permit program is in effect. This provision makes it clear that the prohibition does not “kick in” so long as the applicant has timely filed the application and it is complete and the applicant is not the cause of delay. If the permitting agency is slow to act for any reason, the source and its employees, are not penalized. It is up to the permitting agency to have the resources, the will and the streamlined procedures to act promptly to issue the permit or deny it. While there undoubtedly will be situations requiring that the agency seek more information, if EPA's regulations and guidance on completeness are adequate, such requests should be kept to a minimum. Repeated requests could be used to delay determinations of completeness and permit decisions to the detriment of the applicant and the program. All delays should be avoided.

Copies and availability.—Subsection (e) provides that a permit application, compliance plan, emissions or compliance monitoring report, certification, and the issued permit “shall be available to the public and copies made at a reasonable cost.” However, section 114(c) applies to these documents, except an issued permit, and the applicant may submit information separately in section 114(c) situations. This is not a new requirement, but it is an important one of balancing disclosure with the need for protecting competitive or sensitive information subject to section 114(c).

While the contents of the permit are not entitled to protection pursuant to section 114(c) of the Act, the contents of the compliance plan and the permit application, whether or not incorporated by reference into the permit document, may be entitled to the protections afforded by section 114(c) for certain enumerated types of information, provided that the applicant has made a properly documented confidentiality claim and met the other requirements of that section. In the case of the permit itself, authorities should exercise care in seeing to it that control requirements themselves are expressed in a way that protects proprietary information to the degree consistent with enforcement. This assures that the agency has the information that it needs to fulfill its responsibilities, but competitors do not have such access.

New Section 404. Permit requirements and conditions

Conditions.—Subsection (a) provides that each permit shall include a schedule of compliance (which is defined to include emission standards and limitations) and other appropriate conditions as necessary to assure compliance.

Monitoring and analysis.—Subsection (b) gives EPA authority to prescribe by rule procedures and methods for determining compliance and for monitoring and analysis of pollutants regulated under the Act.

Inspection, entry, monitoring certification, and reporting.—Subsection (c) provides that permits will include provisions on inspections, entry, monitoring, compliance, certification, and reporting to ensure compliance with permit terms and conditions. Section 114(c), as provided in that section, shall apply to information, reports, data, compliance and certifications obtained. The monitoring and reporting requirements are subject to the rules under subsection (b). Monitoring certifications and reports are to be signed by a responsible corporate official who shall certify to the extent of his knowledge of reasonably available operational information, including monitoring reports.

General permits.—Subsection (d) provides that the permitting authority may issue general permits for numerous similar sources within a geographical area. This provision is designed to reduce the administrative burden of permitting large numbers of similar

sources, which may be small individually, but which in the aggregate require control. For example, general permits may be appropriate for certain categories of area sources regulated under section 112.

Temporary sources.—Some sources requiring permits do not operate at fixed locations. These might include asbestos demolition contractors and certain asphalt plants. Subsection (e) allows the permittee to receive a permit allowing operations, after notification to the permitting authority, at numerous fixed locations without requiring a new permit at each site. Any such permit must assure compliance at all locations of operation with all applicable requirements of the Act, including visibility protection and PSD requirements and ambient standards.

No less stringent requirement.—Subsection (j) provides in paragraph (1) that a permit may not be reissued or modified to contain emission limits or other requirements that are less stringent than the comparable provisions in the prior permit or that applied to a source under an applicable SIP. All of this, of course, is subject to the other provisions of this Act. This provision and the entire permit title are not to be viewed as separate and independent authority, but as a means for carrying out the policy and requirements of the rest of the Act regarding applicable stationary sources. Also, the provision must be considered in light of the other provisions of this title, such as the single source provisions.

Paragraph 2 of this subsection authorizes reissuance or modification of permits, in accordance with section 405, to contain a less stringent emission limitation or other requirement when the proposed permittee shows that they are consistent with any demonstration of attainment in any progress requirement in an approved SIP and that this will not otherwise interfere with attainment of the NAAQS progress requirements and other requirements of this Act. This may also occur if the increased emissions are compensated for by emission reductions from another permitted facility under EPA rules, the alterations or additions to the source occur after permit issuance when information is available that was not available when the permit was issued and that, if known would have justified application of a less stringent emissions limitation requirement at that time, technical mistakes or mistaken interpretations of law were made when the permit was issued, or the permittee demonstrates that it has installed the controls required to meet the emission limits and requirements in the permit and has properly constructed and tested the facility, but has been unable to achieve the limitations.

Paragraph 3 of the subsection prohibits any permit from being reissued that contains standards less stringent than those established under either section 111 or 112 and are applicable to the source unless the standard has been revised or there is, in the case of section 112, an alternative emission limitation.

Compliance.—Subsection (g) makes it clear that compliance with a permit issued under this title shall be deemed compliance with the prohibitions on operations in section 402(a). Except in cases where EPA by rule provides otherwise, a permitting agency may also provide that the permittee shall be deemed to be in compliance with other applicable provisions of this Act. This provision would not apply in the case of a standard issued under section 112(a).

This provision sometimes called a “shield” is not mandatory. Indeed, the permitting authority is merely authorized to provide the shield. Additionally, EPA may preclude the use of the shield in particular situations by rule.

It should be emphasized that the operating permit to be issued under this title is intended by the Administration to be the single document or source of all of the requirements under the Act applicable to the source. Indeed, Title IV provides that the permit must include a schedule of compliance which is all the measures leading to compliance with an applicable SIP, emission standard, emission limit, or emission prohibition. The permittee, the permitting agency, and the citizen all should be able to look at the permit to know what are the requirements applicable to the source under the Act. It is not merely a permit under, for example, Title III or Title IV. In light of the provisions in section 402(a) regarding operations of the source, that the permittee may be protected or “shielded” during the term of the permit from allegations that it is not in compliance with some provision of the Act not covered by the permit inadvertently or otherwise.

As to the question of new regulations, Title IV provides a mechanism for EPA or the permitting agency to require the permittee to comply with those regulations. Additionally, Title IV requires that the permitting authority have adequate authority to terminate, modify, or revoke and reissue permits for cause. In short, there are protections afforded the permitting agency if it chooses to authorize the shield. There should not be matters applicable to the source under the Act that are not addressed in the permit.

Again, the Committee stresses that the permit is the document that everyone should look at to know what a permittee should do to comply with the Clean Air Act. Clearly, the permit should provide protection for the operating source against claims involving matters covered by the permit, otherwise the permit would have little value. But of course, that judgment is in the hands of the permitting agency.

New section 405. Notification to Administrator and contiguous States

Transmission and notice.—Subsection (a) requires each permitting authority to transmit to EPA copies of permit applications and to give notice in accordance with EPA regulations of every action related to the consideration of the application. The regulations of EPA presumably would spell out the pertinent actions that would be important for EPA to receive so as to not burden EPA with an undue amount of paperwork.

The subsection also requires the permitting authority to notify contiguous States, in which the emission originates, of the application, of each proposal forwarded to EPA and to provide an opportunity to the States to submit written recommendations concerning the permit and its terms and conditions. If the recommendations are not adopted by the permitting authority, it shall notify the applicable State and EPA in writing of its failure to accept the recommendations and the reasons therefore.

The Committee expects the States and EPA, in carrying out this subsection, to ensure that the permittee or applicant is not left in the dark about these various actions and transmittals and is aware of the recommendations of the contiguous States, including the actions planned by the permitting authority regarding them. Further, the recommendations from another State must be consistent with the Act, the SIP, and the applicable regulations. This process should also be carried out in a manner that does not delay decisions on permits by the permitting authority. Contiguous States should act promptly and it is not necessary that the permitting authority actually ascertain the views of those States. It is presumed that in some cases a source located in one State will have no impact, partly because of its geographical location in that State, on a contiguous State. For example, it would be difficult to expect a facility in El Paso, Texas to have much impact on Louisiana, which is contiguous to Texas. Similarly, a source located in Western Colorado would probably not have an impact on contiguous States east of Colorado. While this provision could be useful in many respects, it should not be used to unduly impede permitting actions.

Objections by EPA.—Subsection (b) provides that the permitting authority must respond in writing to EPA within 45 days after EPA receives a proposed permit or within 45 days after EPA receives notification from a contiguous State and objects in writing to the issuance of the permit as not in compliance with the Act. EPA must include with its objection a statement of reasons and must provide the objection and statement to the applicant.

This provision has to do with EPA's oversight and potential veto of an operating permit. EPA is given case-by-case opportunity to exercise this authority without unnecessarily lengthening the permitting process and creating an enormous backlog of applications. After a State or local agency proposes to approve a permit, EPA will have an opportunity to provide comments on a permit during the regular public comment period, just as anyone else can. EPA should use that opportunity whenever possible and use this authority sparingly. If the State or local agency issues the permit in spite of EPA objection, EPA can always reevaluate the State's authority under section 402(i), but if EPA is going to object they must do so within this time frame.

Issuance or denial.—Subsection (c) provides that if the permitting authority fails within 90 days after the date of the objection to revise the permit to meet the objection, EPA shall issue or deny the permit in accordance with the requirements of this title. In effect, EPA would have to ensure compliance with all of the provisions of the title, including those that afford the applicant

an opportunity for notice and hearings. The EPA objection is not subject to judicial review until EPA takes final action on the permit.

Waiver of notification requirement.—Subsection (d) provides authorization to EPA to waive the provisions of the section relative to notice to EPA and to contiguous States at the time of approval of a permit program for any category of sources covered by the permit program. EPA can issue regulations establishing the sources to which the requirements of subsections (a) and (b) will not apply. EPA can revoke this waiver or modify it by rule.

This provision helps to lessen the potential burden of subsections (a) and (b) on the permit program that some fear. It gives EPA the opportunity to be more selective in applying these subsections and avoiding having to use its resources inefficiently and without much benefit for air quality. We cannot be sure how many sources will have to apply for permits, but as the numbers grow, provisions like subsections (a) and (b) might be difficult to implement without this waiver authority.

Refusal of permitting authority to terminate, modify, or revoke and reissue.—Subsection (e) provides that if EPA finds that cause exists to terminate, modify, or revoke and reissue a State permit under this title, the Administrator must notify the permitting authority and the source at that time. Thereafter, the permitting authority will have 90 days to submit to EPA a proposed determination of termination, modification, revocation and reissuance of the permit. EPA can extend that period for another 90 days if appropriate. If the permitting authority fails to submit the proposed determination or if EPA objects and the permitting authority fails to resolve the objection within 90 days, EPA, after notice and in accordance with fair and reasonable procedures, may terminate, modify, or revoke and reissue the permit.

The Committee believes that it is important that whenever this process is invoked by EPA that every opportunity be provided to keep the source aware of the matter and not be surprised by any EPA action. In many cases, it may even be possible that once the source learns of the problem that the permittee may be willing to find ways to resolve it, short of termination, modification, revocation and reissuance of the permit. Thus, it behooves EPA to involve the source early in the matter. That does not mean that the source is obligated to adhere to whatever EPA's views may be. The permittee has a permit and has a right to expect it to be terminated, modified, revoked and reissued only in accordance with proper procedure and statutory requirements.

New section 406. Other authorities

State or interstate authorities.—Subsection (a) is a disclaimer making it clear that the title does not prevent a State or interstate permitting authority from establishing additional permitting requirements that are consistent with the Act and EPA's regulations.

Acid deposition program.—Subsection (b) is also a disclaimer which makes it very clear that EPA is not authorized under this title to terminate, modify, revoke or reissue any allowance allotted or issued under Title V. This disclaimer applies to the State permitting authority.

Section 407. Small source technical and environmental compliance assistance program.—New section 407 is a small source/small business provision added by the Committee. It seeks to help small businesses to comply with the problems that are likely to occur under the Act as amended by this bill. For purposes of this section, small businesses or small emitters are defined as sources that are emitting 100 tons or less per year and that have a number of employees that would qualify them for assistance from the Small Business Administration (SBA).

As we look to the future of environmental protection under the Act, we take special steps here to ensure that it is possible for these small businesses to comply with minimum hassle and in recognition of the problems that are unique to them. Such small businesses include printers, furniture makers, dry cleaners, and millions of other small businesses in this country.

Consistent with sections 110 and 112 each State is required after notice and hearings to adopt and submit to EPA as part of this SIP (or as a revision of their SIP) plans for establishing a small source technical and environmental compliance

assistance program. The State must do this within 24 months after enactment. EPA must improve the program in the SIP within the time frame specific in section 110 for SIPs. EPA must approve it if it includes adequate mechanisms for developing, collecting, evaluating, and coordinating information concerning compliance methods and technologies for small sources; adequate mechanism for advising small sources on pollution prevention and methods of operation that help reduce pollution; a State office within the relevant State agency to serve as an ombudsman for small sources in dealing with the State Air Pollution Agency, including its permitting function; a program for permits that meets the requirements of paragraph 3 of this subsection and an adequate mechanism to insure that small sources are notified of their rights under the Act so as to have adequate time to evaluate compliance methods in any relevant or applicable proposed or final regulation or standard issued under the Act.

Subsection (b) provides that EPA will set up a small source technical assistance program within nine months after enactment to help the States, under section 112(m) and this subsection, to issue technical guidance for the States in implementing these programs and to provide for implementation of the program under paragraph 3 in any State that fails to comply with the requirements of this subsection.

Subsection (c) provides that the State must establish a permit program for small sources located within any nonattainment area, ozone transport area, or subject to a standard under section 112. The program should provide that the source will have the option of obtaining an individual permit which shall be developed after consultation with the source or its representative which will require compliance with applicable standards and regulations or requirements of this Act, except that the methods of, and time for, compliance with any such standard or requirement may be modified in the permit based on the technical and financial capability of the source or group of sources, and the availability of less burdensome alternatives. The modifications must achieve equivalent reductions, consistent with the goals and deadlines of the Act. Any such permit must be issued in accordance with the procedures of this title and be subject to EPA's review. The State or EPA may reduce a fee required under the Act to take into account the financial resources of the source. Requirements for continuance of Continuous Emission Monitors (CEMs) will not be imposed on such sources, unless the State or EPA has determined that the requirements are necessary.

Subsection (d) defines who is eligible to participate in this program and provides for consultation with the SBA and the exclusion from coverage of any category or any subcategory of sources that the SBA determines have sufficient technical and financial capability to meet the requirements of this Act, without application of this subsection.

Subsection (e) sets up an office in EPA for monitoring these programs.

Subsection (f) provides for a compliance advisory panel at the State level. This compliance advisory panel must include seven small business owners. The panel will render advisory opinions considering the program's effectiveness, difficulties encountered, and the degree of severity and enforcement. The panel will make periodic reports, review information for small stationary sources to ensure that it is understandable to the lay person and have the EPA program serve as the secretariat for the development and dissemination of the reports and advisory opinions.

Title V: Acid Deposition Control

INTRODUCTION

Title V of H.R. 3030 contains provisions to control emissions of SO₂ AND NO_x FROM ELECTRIC UTILITIES. THESE EMISSIONS ARE THE LEADING CAUSE OF ACID DEPOSITION, MORE COMMONLY KNOWN AS "ACID RAIN."

The acid deposition control program in this title uses a market-based allowance system recommended by President Bush to reduce SO₂ EMISSIONS FROM UTILITIES TO 8.9 MILLION TONS A YEAR BY 2000. THIS REPRESENTS AN ESTIMATED REDUCTION OF 8.5 MILLION TONS FROM 1980 LEVELS. IN CONJUNCTION WITH AN EXPECTED REDUCTION FROM 1980 LEVELS OF 1.5 MILLION TONS FROM OTHER NONUTILITY SOURCES, THE BILL IS ESTIMATED BY THE PRESIDENT TO REDUCE A NET REDUCTION OF 10 MILLION TONS OF SO₂.

The Committee is aware that there is some uncertainty about the accuracy of these estimates, particularly in regards to the estimates of historical, nonutility emissions. If, as the utility industry suggests, those nonutility emissions were greater from 1980–1985 than estimated by EPA, then the net reduction would be greater than 10 million tons of SO₂ AND THE IMPACT WOULD BE GREATER ON THAT INDUSTRY AND ITS CUSTOMERS.

In an October 24, 1989 statement, EPA defended their estimates as follows:

The Edison Electric Institute, the National Coal Association, and others have recently used NAPAP data to argue that more credit should be given for non-utility SO₂ EMISSION REDUCTIONS BETWEEN 1980 AND 1985. SPECIFICALLY, THEY ARGUE THAT THE 2.7-MILLION-TON SO₂ EMISSIONS DIFFERENCE BETWEEN NAPAP-80 AND NAPAP-85 IS THE APPROPRIATE AMOUNT OF CREDIT, RATHER THAN THE 1.1-MILLION-TON DIFFERENCE ALLOWED BY EPA IN CRAFTING TITLE V OF THE ADMINISTRATION BILL.

EPA determined that 1.1 million tons is the appropriate credit based on EPA Trends data, which is the only reliable indicator of emission differences between years. As its name implies, the Trends data is calculated explicitly to determine year-to-year changes in total national emissions based on a consistent, standard methodology. By contrast, the NAPAP data provides a detailed estimate for a single year, but is not suitable for use in comparing one year to another. This is because NAPAP has changed its methodology over the years to eliminate 1980 data quality problems.

In order to try to resolve this controversy, the Committee asked the Energy Information Administration (EIA) and the Director of the NAPAP to analyze the data, which are all derived from Government sources. Both have replied with analysis that indicates that the nonutility emission reductions historically were, in fact, greater than estimated by EPA. Both have made recommendations for reexamining the matter. The Committee asked the EPA to do so on January 19 and February 9, 1990. At the time this bill was reported, the EPA had not replied. Thus, the bill continues to rely on EPA's data and estimates.

The title uses a more traditional approach to controlling NO_x EMISSIONS. IT REQUIRES THE ADMINISTRATOR TO SET CERTAIN SPECIFIED EMISSION LIMITATIONS FOR ELECTRIC UTILITY SOURCES WHICH ARE PROJECTED TO BE SUFFICIENT TO REDUCE NO_x EMISSIONS BY 2.5 MILLION TONS BELOW THE ADMINISTRATOR'S 1989 PROJECTIONS OF THE LEVEL OF NO_x EMISSIONS IN THE YEAR 2000.

BACKGROUND

What is acid rain?

Rain is naturally acidic. However, rain in many parts of the U.S. is more acidic than natural background. This excess acidity is caused by sulfuric acid and nitric acid. Emissions of SO₂ AND NO_x FROM MAN'S ACTIVITIES REACT IN THE ATMOSPHERE TO FORM TINY ACIDIC PARTICLES, CALLED "SULFATES AND NITRATES." THESE PARTICLES WHICH ARE "SECONDARY POLLUTANTS," CAN BE DEPOSITED NEAR THE EMISSION SOURCE OR CAN REMAIN AIRBORNE FOR HUNDREDS, OR EVEN THOUSANDS, OF MILES. THEY CAN ULTIMATELY BE DEPOSITED IN DRY FORM TO THE EARTH OR BE WASHED OUT OF THE ATMOSPHERE IN WET FORM BY RAINS. IN THE LATER CASE, THEY TURN INTO SULFURIC AND NITRIC ACIDS, PRODUCING WHAT IS COMMONLY CALLED "ACID RAIN" OR "ACID DEPOSITION."

The effect of man-made emissions of SO₂ AND NO_x IS WIDESPREAD. IN THE 31 STATES EAST OF THE MISSISSIPPI, RAIN IS ALMOST ALWAYS ACIDIFIED. THE AVERAGE RAIN IN THE EASTERN HALF OF THE NATION HAS A PH OF 4.5, TEN TIMES MORE ACIDIC THAN RAIN UNAFFECTED BY MAN'S ACTIVITIES.¹ In the most affected areas of the country, such as parts of Pennsylvania, Ohio, West Virginia, Maryland, and New York, the rainfall has an average pH of less than 4.2.²

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Precursors of acid rain deposition

SO₂ emissions.—SO₂ EMISSIONS CAUSE TWO-THIRDS OF THE MAN-MADE ACID DEPOSITION FALLING IN THE EASTERN U.S., AND ABOUT ONE-THIRD OF THE ACID DEPOSITION FALLING IN THE WESTERN U.S.³

In 1985, total national annual emissions were 23.1 million tons of SO₂, 20.5 MILLION TONS OF NO_x AND 22.1 MILLION TONS OF VOCs. ABOUT TWO-THIRDS OF THE SO₂ EMISSIONS COME FROM UTILITY POWERPLANTS, ABOUT A QUARTER COME FROM INDUSTRIAL PROCESSES AND INDUSTRIAL BOILERS, AND THE REMAINDER COME FROM OTHER SOURCES, INCLUDING COMMERCIAL AND RESIDENTIAL BOILERS, RAILROADS, VESSELS, AND OFF-HIGHWAY VEHICLES. WHEREAS 75 PERCENT OF SO₂ EMISSIONS COME FROM LARGE PLANTS EMITTING AT LEAST 10,000 TONS OF SO₂ PER YEAR, MOST NO_x AND VOC EMISSIONS COME FROM A LARGE NUMBER OF SMALLER, MORE DISPERSED SOURCES, INCLUDING TRANSPORTATION SOURCES.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Regionally, the highest concentration of SO₂ EMISSIONS COMES FROM UTILITIES IN MIDWESTERN STATES THAT BURN HIGH-SULFUR COAL TO GENERATE ELECTRICITY. NINE STATES—OHIO, INDIANA, PENNSYLVANIA, ILLINOIS, MISSOURI, TENNESSEE, KENTUCKY, WEST VIRGINIA, AND GEORGIA—ACCOUNT FOR 50 PERCENT OF THE NATIONWIDE INVENTORY OF SO₂ EMISSIONS.⁴ Under Title V these States are required to do more than 75 percent of the cleanup.

NO_x emissions.—NO_x EMISSIONS ARE THE OTHER MAJOR PRECURSOR TO ACID DEPOSITION, CAUSING ABOUT ONE-THIRD OF THE ACID DEPOSITION IN THE EAST AND A FAR GREATER PORTION IN THE WEST.⁵

NO_x EMISSIONS ARE A BY-PRODUCT OF THE COMBUSTION OF FOSSIL FUELS, INCLUDING COAL, NATURAL GAS, OIL, AND GASOLINE. UTILITIES EMIT 33 PERCENT OF THE NATIONAL INVENTORY OF NO_x; INDUSTRIAL SOURCES, 20 PERCENT; AND CARS, TRUCKS, TRAINS, AND OTHER “MOBILE SOURCES,” 43 PERCENT.⁶

The following table shows recent estimates from the OTA of historical and predicted future NO_x EMISSIONS, IN MILLIONS OF TONS, ASSUMING NO ADDITIONAL CONTROLS.⁷

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The impacts of acid deposition

Acid deposition is associated with a number of environmental receptors: aquatics, materials, crops, forests, human health, and visibility.⁸

Acid deposition has been clearly implicated in acidifying lakes, thereby affecting fish and other water-dwelling organisms, in the eastern United States and Canada.⁹ It is generally agreed that lakes vary in their vulnerability or “sensitivity” to acidification. A lake’s ability to resist acidification has to do with its buffering capacity or acid neutralizing capacity (ANC).

The National Surface Water Survey (NSWS) (which included the Characteristics of Lakes in the Eastern United States, and Characteristics of Lakes in the Western United States) have vastly improved our understanding of the extent of the damage that has already occurred and of the differing sensitivities of many of our lakes. Among NSWS lakes, 4.2 percent of the total

number of the surveyed lakes were acidic and over half had ANC of less than or equal to 200 microequivalents per liter (ueq/L). Five percent had pH less than or equal to 5.5. Most acidic lakes were in the Northeast, Florida, and the Upper Midwest; less than 1 percent of the lakes in the West, Minnesota, and the Southern Blue Ridge subregion were acidic, but many more were sensitive. 2.7 percent of stream length in the National Stream Survey is acidic and one-half has ANC less than or equal to 200 ueq/L. Most of the acidic streams are in the mid-Appalachian and mid-Atlantic coastal plains.

NAPAP has concluded (National Precipitation Assessment Program, State of Science and State of Technology, December 1989 Washington, D.C. January 1990) that atmospheric deposition is the dominant source of current acidity in the acidic-dominated lakes and streams. Because of sampling methods, NAPAP also concludes that “the total numbers of acidic and low pH surface waters in the United States are actually greater than those estimated in the NSWS.”

Scientists differ as to how many of the sensitive systems will actually acidify. Thus, there is debate about what future environmental damage will be in the absence of corrective action, let alone the particulars of the timing, level, and geographic scope of acid deposition reduction warranted in order to prevent such damage.

Acid deposition has also been implicated in corroding materials (e.g., paint, building surfaces, etc.). However, since pollution is only one of many environmental factors (e.g., temperature fluctuations, sunlight, salt, microorganisms) that cause materials to damage, it is difficult to determine what proportion of damage it accounts for.

A broad range of scientists believe that acid deposition by itself at current levels is not affecting crops in the United States. Ozone, another pollutant, does significantly affect crop yield. Some scientists are concerned that acid deposition in combination with ozone may affect crops somewhat more severely than ozone alone.

There is no scientific consensus at this time as to whether acid deposition is implicated in general forest damage. Acidic deposition, ozone, or a combination of both, as well as other stresses, such as climate fluctuations and disease, are being investigated by scientists as possible contributors to forest damage. NAPAP, for example, says that acid deposition is implicated in damage to spruce trees at high elevations at isolated locations in the U.S.

There is also a broad range of scientists that believe that acid aerosols (droplets in air) cause respiratory problems in sensitive populations at ambient levels. Children and asthmatics appear to be the population at risk,¹⁰ but the available data are not definitive as to the magnitude of the risk. There is disagreement as to the seriousness and extent of this problem. Some researchers believe that acid aerosols may increase national deaths by a few percent, (causing on the order of 50,000 deaths per year).¹¹ Other researchers believe that these pollutants have a negligible effect on mortality.

There is scientific consensus that acid particles significantly affect visibility—the distance that the eye can see. In the Eastern United States, sulfate particles are responsible for about half of the decrease in visibility annually and a higher proportion during the summer.

Scientific uncertainty and the risk of delay

The Committee received a wealth of testimony on the causes and effects of acid deposition over the years. The Committee concluded that, despite significant uncertainties, because of the evidence of damage that had already occurred as well as the likelihood of further substantial damage in the absence of Congressional action, a major acid deposition control program is warranted.

The Committee has learned that there is uncertainty regarding future emission trends in the absence of a control program. Forecasters differ as to whether emissions will remain constant, increase, or decline and over what time period. Each of these emission scenarios has different implications for the environment.

There is also uncertainty regarding the relationship between emissions and deposition. Most scientists believe that on a large enough scale, and when averaged over a year's timeframe, deposition is roughly proportional (linearly related) to emissions. Nonlinearities do occur on smaller scales and over shorter time periods. Thus, the relationship between overall emissions levels and deposition in specific local ecosystems is exceedingly difficult to predict. But, looking at the big picture, it is reasonable to expect that, nationally, the roughly 40 percent reduction in sulfur oxide emissions required by Title V will result in a roughly 40 percent reduction in acid deposition.

Scientists differ as to how they characterize the so-called "dose-response" issue; i.e., exactly how much deposition it takes to acidify a lake or corrode a building. Also, while there is consensus on the extent of lake acidification and visibility degradation, scientists differ as to their assessment of the effect of acid deposition on materials, forests, and human health.

Most scientists agree that there are risks to all of the resources, they differ as to what they think the magnitude of these risks are and the timeframes in which damages could occur. Thus, scientists differ in their assessments of the urgency of the acid deposition problem. Under almost any reasonable scenario, a substantial reduction in acid deposition precursors is expected to yield significant environmental benefits.

Most scientists agree that sulfate deposition is the main culprit in the long-term acidification of lakes.^{1 2} However, many scientists are concerned that nitrate deposition may play a role in short-term "acid pulses" that occur in the springtime and that may be associated with fish kills. Sulfur is also a concern for visibility, materials and human health effects.

However, some scientists, particularly those involved in NAPAP, believe that VOCs and ozone are important. These scientists believe that sulfur emission reductions will not yield proportional reductions in sulfur deposition because of the complex conversion process in which VOCs and ozone play a role.

It is difficult to say which pollutants are of greatest concern with regard to forestry effects. All are suspect at this time.

Scientists can give Congress guidance as to roughly how protective they think different control programs would be of the different resources, but it is up to Congress to decide how risk-averse it wants to be. No magic number emerges purely from the scientific data.

In testimony before the Committee Dr. Ellis Cowling of the National Academy of Sciences said, "For many different combinations of pollutants and specific biological effects, there is no distinct threshold dose and no safe concentrations below which we are certain there will be no adverse effects. This means that any important decrease in emissions is going to lead to benefits somewhere."

Clearly the longer Congress waits, the more environmental degradation will occur. But, other than telling the Committee "the sooner the better," scientists cannot agree on a single estimate of exactly how much incremental damage will occur. The Committee received testimony that, in the case of lake acidification, it would take approximately ten years for lakes to recover from acidification once emissions were reduced. Since it will take at least ten years for Title V to be fully implemented, there would be twenty years from the time Title V passes until the time many lakes will recover.

There are two major reasons why Congress might want to delay implementing a control program. The first reason might be to wait for more scientific information. Each year brings more and better information on acid deposition. The NAPAP report is due this year. The study cost over \$600 million. We should get its results. The other major reason to delay is to reduce the costs of compliance. Time facilitates economic adjustment, so a program with later deadlines will be less economically disruptive than one with earlier deadlines. Also, the later the deadline, the more likely it is that more effective and more cost-effective technologies will be available. Both of these reasons must be balanced against the risks to the environment of delay.

At least one comprehensive attempt has been made to quantify the damages caused, in dollar terms, by SO₂ EMISSIONS. THE EPA PERFORMED A Regulatory Impact Analysis of the NAAQS for SO₂ in 1987. The study examined health effects, soiling and materials damage, climate and visibility effects, agricultural and forest effects, and aquatic effects. For those categories for which monetary estimates could be made, the study came up with a plausible range of \$4.2 to \$6.2 billion of expected benefits to be obtained from reducing SO₂ BY AN AMOUNT SIMILAR TO TITLE V'S REQUIREMENTS. SINCE MANY BENEFIT CATEGORIES WERE NOT QUANTIFIABLE IN THIS MANNER, IT IS LIKELY THAT THE BENEFITS OF A MAJOR SO₂ REDUCTION WOULD BE HIGHER.

The Committee concluded that there is an extraordinary amount of information available about this issue. Much of the NAPAP information is public and no one contends that acid deposition is beneficial. Reductions of the precursors appear warranted. In complex environmental issues, there is always substantial scientific uncertainty.

While the Committee found the compliance cost arguments persuasive, it decided that such cost arguments did not outweigh the potential risk to the environment of delay. However, the Committee did seek to mitigate compliance costs in a number of ways.

Control strategies for acid deposition

There are a number of readily available technologies that can lower SO₂ AND NO_x EMISSIONS—AND THEREBY REVERSE, OR AT LEAST LIMIT, ACID DEPOSITION'S ADVERSE IMPACTS.

SO₂ controls.—There are two basic approaches for reducing SO₂ EMISSIONS FROM COAL-FIRED POWER PLANTS: FUEL-SWITCHING AND POST-COMBUSTION TECHNOLOGIES, SUCH AS SCRUBBING FOR EXISTING PLANTS. ANOTHER WAY IS TO WAIT FOR NEW, WELL-CONTROLLED PLANTS TO REPLACE EXISTING PLANTS THAT ARE DIRTY AND AGING. HOWEVER, THE LATTER APPROACH IS NOT LIKELY TO OCCUR SOON FOR MANY REASONS.

Fuel switching involves shifting the fuel source of a coal-fired power plant from high-sulfur to low-sulfur coal. High-sulfur coal contains up to 5 lbs. of sulfur per million British thermal units (Btu) of heat content. (Such coal will produce about 10 lbs. of SO₂ PER MMBTU WHEN BURNED IN AN UNCONTROLLED POWER PLANT.) BY CONTRAST, THE VERY CLEANEST COAL CONTAINS LESS THAN 0.5 LBS. OF SULFUR PER MMBTU.

Fuel switching can also often be an economical way to lower SO₂ EMISSIONS, DEPENDING ON THE PROXIMITY OF THE NEAREST LOW-SULFUR COAL.^{1 3} However, fuel switching shifts jobs away from high-sulfur coal mines, with adverse impacts on employees and economies dependent on jobs in those mines.

The most common technological means of control is to install flue gas “scrubbers” on power plant smokestacks. These devices inject lime or limestone, into the flue gas from the plant, capturing up to 95 percent of the SO₂ EMISSIONS.

Current law requires technological controls for SO₂ ON “NEW PLANTS.” THE 1971 NEW SOURCE PERFORMANCE STANDARD (NSPS) REQUIRED NEW POWER PLANTS TO ACHIEVE AN SO₂ EMISSION RATE OF 1.2 LBS/ MMBTU. THIS RATE COULD BE MET BY ANY CONTROL STRATEGY, INCLUDING COMBUSTION OF LOW-SULFUR COAL. IN 1979, EPA AMENDED THE NEW SOURCE STANDARD TO IMPLEMENT THE “PERCENT REDUCTION” REQUIREMENT OF THE 1977 AMENDMENTS TO THE CLEAN AIR ACT. THE 1979 STANDARD MANDATES THAT ALL NEW PLANTS REDUCE SO₂ EMISSIONS BY 70 PERCENT TO 90 PERCENT, DEPENDING UPON THE SULFUR CONTENT OF THE COAL BEING USED. THIS REQUIREMENT AND THE “BACT” REQUIREMENT FOR PSD PROGRAM FOR NEW SOURCES EFFECTIVELY REQUIRES ALL NEW POWER PLANTS TO INSTALL SCRUBBERS.

NO₅x controls.—There are at least three potential control strategies for lowering NO₅x EMISSIONS FROM POWER PLANTS AND OTHER MAJOR STATIONARY SOURCES: LOW-NO₅x BURNERS, GAS REBURNING, AND SELECTIVE CATALYTIC REDUCTION. THE INITIAL 2.5 MILLION TON NO₅x EMISSION REDUCTION REQUIRED UNDER THIS TITLE IS BASED ON THE EXPANDED USE OF LOW-NO₅x BURNERS. CURRENT LAW REGULATES THE NO₅x EMISSIONS FROM NEW PLANTS, REQUIRING THEM TO MEET A NO₅x STANDARD OF 0.5 TO 0.6 LBS/MMBTU, DEPENDING ON THE COAL TYPE.

Clean coal technologies.—“Clean coal” technologies refer to innovative techniques for reducing SO₂ AND NO₅x EMISSIONS. SINCE 1984, THE DOE HAS PROMOTED DEVELOPMENT OF CLEAN-COAL TECHNOLOGIES BY PARTIALLY FUNDING DEMONSTRATION PROJECTS IN PARTNERSHIP WITH THE PRIVATE SECTOR AND STATE AND LOCAL GOVERNMENTS. FORTY PROJECTS HAVE BEEN SELECTED UNDER DOE'S PROGRAM TO DATE.

There are two basic types of clean-coal technologies: retrofit technologies, which are designed to reduce SO₂ AND NO₅x EMISSIONS FROM EXISTING PLANTS, AND REPOWERING TECHNOLOGIES, WHICH ARE DESIGNED FOR USE WHEN AN EXISTING PLANT IS REBUILT FROM THE GROUND UP. THE MORE PROMISING REPOWERING TECHNOLOGIES INCLUDE FLUIDIZED BED COMBUSTION, WHICH INVOLVES BURNING A COAL-LIMESTONE MIXTURE AS IT IS SUSPENDED IN MIDAIR BY JETS OF AIR, AND COAL GASIFICATION, WHICH INVOLVES CONVERTING COAL TO A GAS PRIOR TO COMBUSTION. FLUIDIZED BED COMBUSTION CAN REDUCE SO₂ EMISSIONS BY 90 PERCENT OR MORE, ABOUT THE SAME AS A SCRUBBER, AND INCREASE THE EFFICIENCY OF THE POWER PLANT BY 10 PERCENT OR MORE. COAL GASIFICATION CAN REDUCE SO₂ EMISSIONS BY 99 PERCENT.^{1 4}

The three-year compliance extension in the bill is expected to provide a significant incentive for utilities to try out new repowering technologies. Because several new technologies are expected to become commercially available between 2000 and 2005, the extension provides a window of opportunity.

Control of acid rain under the existing Clean Air Act.—NO₅x AND SO₂ ARE NOT ONLY PRECURSORS TO ACID DEPOSITION; THEY ARE ALSO CURRENTLY REGULATED BY THE CLEAN AIR ACT AS LOCAL AIR QUALITY PROBLEMS. ALL POWER PLANTS MUST MEET THE ENVIRONMENTAL REQUIREMENTS SPECIFIED IN SIPs FOR PURPOSES OF ATTAINING THE NAAQS FOR SO₂, NO₅x AND PARTICULATES. THE SIP LIMITS VARY FROM PLANT TO PLANT DEPENDING UPON LOCAL AIR QUALITY. ALL NEW COAL PLANTS ARE REQUIRED BY FEDERAL LAW TO MEET NSPS AND BACT FOR THE PSD PROGRAM FOR THESE POLLUTANTS.

It is arguable whether long-range transport could be adequately addressed by the existing Clean Air Act. The EPA has generally argued that the Clean Air Act as currently written does not allow for EPA action on long range transport. Others have argued that EPA could address acid rain under existing law if it so desired, for example by tightening the SO₂ AMBIENT AIR QUALITY STANDARD, ISSUING TIGHTER REGULATIONS UNDER SECTION 123 OF THE EXISTING ACT (THE STACK HEIGHT PROVISIONS, I.E., SO THAT POWER PLANTS COULD NOT TAKE ADVANTAGE OF DILUTION IN ORDER TO MEET SIP LIMITS), OR TIGHTENING THE NSPS. TITLE V OF THE BILL RESOLVES THESE ARGUMENTS BY PROVIDING A COMPREHENSIVE PROGRAM FOR REGULATING ELECTRIC UTILITY SO₂ AND NO₅x EMISSIONS.

Summary of title V.—The generally accepted approach to reducing acid rain is to reduce emissions of the acid-forming pollutants, SO₂ AND NO₅x. H.R. 3030 AS REPORTED FROM THE COMMITTEE FOLLOWS THIS APPROACH. ITS ACID RAIN PROGRAM—TITLE V OF THE BILL—CALLS FOR ACHIEVEMENT OF A 10-MILLION-TON REDUCTION IN SO₂ EMISSIONS BELOW 1980 LEVELS BY DECEMBER 31, 2000, AND IT CALLS FOR A RETROFIT OF LOW-NO₅x BURNERS THAT ARE EXPECTED TO PRODUCE AN APPROXIMATELY 2.5-MILLION-TON REDUCTION IN

NO₅x EMISSION BELOW PROJECTED YEAR 2000 LEVELS BY THE SAME YEAR. THESE REDUCTIONS WILL SUBSTANTIALLY REDUCE LEVELS OF ACID DEPOSITION IN THE U.S. AND CANADA.

The cap.—The “cap” (of 8.9 million tons of SO₅₂ per year) and the means by which that cap is enforced are the centerpiece of the Title V compliance program. The purpose of the cap is to prevent the erosion of the environmental achievement over time, as noted by Administrator Reilly:

A unique feature of the Bush Acid Rain Bill is that we maintain our reductions, our ten million ton reduction, over time. We do not merely achieve one brief shining moment of ten million tons reduced, and then see it eroded away by growth in the next century.

Mr. Reilly testified that without the cap, there would be an additional 1.2 to 3 million tons of SO₅₂ emitted annually in the year 2000 and by the year 2010, up to potentially 5 million tons per year.

The cap is a significant environmental, energy policy and cost issue, because of concerns that the cap could make it very difficult to build new coal-fired power plants. The Committee examined this issue with great care, including the environmental benefits, the costs, the job impacts, and the energy policy implications of the cap.

The Committee learned that the cap could decrease coal use, but that the effect would be modest relative to the benefits, as summarized by Deputy Secretary of Energy Henson Moore:

*** we think this legislation could have an impact of increasing the cost of generating electricity from coal by anywhere from five to eight percent in the aggregate across the country. We also have studies that show that a ten percent increase in the price of coal, which is more than what we are predicting would happen here (under the cap), would produce roughly a reduction of about four percent in the use of coal and (sic.; to generate) electricity. *** So, there would be some (increase), but not that great, and not to where we would see a tremendous amount of fuel switching (away from coal), and a tremendous turning away from one of our natural resources, coal. *** So, there is an impact, and we think the impact is one that is acceptable considering what you are accomplishing with the legislation, and so we are not alarmed by any tremendous change of the use of coal *** although we acknowledge certainly there is some change.

According to a January 19, 1990 memorandum entitled “Relative Cost Impacts of the West and East Under the Offset Provisions of the Administration Bill of Building a New Coal-Fire Power Plant,” prepared by EPA’s contractor, ICF Resources, the cap is expected to increase the costs of a new coal-fired power plant in the East by 5 percent, and a new Western coal-fired power plant by 4 percent. The added costs have two components: (1) EPA expects that new power plants will be scrubbed to a 95 percent removal level (in lieu of the 70–90 percent NSPS level) in order to minimize the number of allowances needed to operate; and (2) EPA forecasts allowance costs of \$800/ton.

The Committee decided in favor of the overall cap, but it made a number of changes in the bill that would make life under the cap a little easier for utilities and their customers, while still obtaining the cap’s air quality benefits. The Committee modified the allowance system provisions through auctions, specifications for EPA regulations, and redistribution of allowances in favor of utilities which would have had relatively few allowances under H.R. 3030 as introduced.

The SO₅₂ allowance, trading program.—Title V contains an innovative “market-based” approach to allocating and enforcing an acid rain reduction program. Although there are precedents for emission trading under the existing Clean Air Act, a nationwide trading program is a major regulatory innovation. Historically, most legislative “command and control” proposals would have allocated requirements to the States, which in turn would have allocated reductions to power plants. H.R. 3030 assigns tradeable allowances directly to the utilities which own the units at power plants. Each allowance is the right to emit a ton of SO₅₂ in a single calendar year.

The Committee carefully explored the workability and enforceability of the allowance system. The Committee was particularly interested in the question of whether the market would work, and whether it would be difficult for new, small entrants (such as public or independent power companies) to obtain allowances.

The Committee bill establishes an auction system to facilitate the liquidity of the market in emissions allowances: an early (March 1992) auction and an annual (June 1993 and annually thereafter) auction. Both provisions are intended to augment the trading of allowances. These provisions attempt to bridge the potential conflicts between the Administration's emission allowance trading objectives, and the superimposition of that market-oriented model upon the heavily regulated electric utility industry.

While H.R. 3030 as introduced created a new currency—emissions allowances—it failed to prescribe clear procedures to ensure the development of a market for those allowances. Section 519 (the auction provisions) is not the sole model for the trading that is anticipated; it is an attempt to “jump-start” such a regime, should it not evolve organically.

The principal institutional impediment to a free market regime is the fact that the allowances created in this legislation will be utility assets and as such subject to the jurisdiction and regulation of State (and sometimes Federal) regulatory authorities. As such, many believe there are substantial constraints on the disposition of these allowances. Other disagree.

During hearings, the term “hoarding” was used to describe the possibility that a utility, of its own accord or in conjunction with a State regulatory authority, might elect to keep tradeable allowances to itself rather than use them or sell them in the open market. It was generally conceded that excessive hoarding, although probably legal, could hinder the effectiveness of a national trading system.

Despite the use of the pejorative term “hoarding,” there are clearly circumstances where such behavior is either prudent or necessary to either the utility or its regulators. For example, a utility might bank allowances to offset its own capacity expansion, or out of projections that the market price of allowances will be higher in the future. The same analysis may apply to the decision of a public utility commission (PUC) to require a utility to bank its allowances for future growth. By contrast, there seems to be little or no positive reason for allowing a utility or group of utilities to hold on to allowances to drive the price up in order to corner the market or gain competitive advantage and, of course, there are obvious legal reasons not to do so.

The issue of potential market failure has significant ramifications for new power plant construction and for the ability of new institutional players in the electric utility industry (including independent power producers) to purchase the allowances necessary to build new coal-fired units.

With regard to new construction in general, the so-called “greenfield cap” provisions of this legislation require new fossil plants to hold the requisite emissions allowances in order to operate after the year 2000. Utilities and States that foresee the need for new capacity after 2000 will have to free up or buy emissions allowances. States and utilities with very low emissions rates by virtue of the baseline established by the Administration's proposal will depend especially upon the existence of a workable emissions allowances market, but even States and utilities with higher emissions rates will have to reduce emissions in order to free up allowances at some expense in order to build new fossil-fired capacity.

Independent (non-utility) power producers are disadvantaged relative to the electric utilities that must purchase some of their allowances in the marketplace. Since virtually none of them is the owner or operator of affected units, they are completely dependent upon the evolution of a viable market in emissions allowances, and in many ways significantly disadvantaged by comparison to the incumbent electric utility industry against which they might be competing.

Most of the new power plants built over the past decade were constructed, not by electric utilities, but by PURPA-qualified facilities (QFs) or independent power producers (IPPs). QFs and IPPs are non-traditional utilities. In most cases, they sell their power to local utilities, often pursuant to State-sanctioned competitive bidding processes or negotiation. Many people project

that most of the nearly 100 gigawatts of new construction needed by the turn of the century will be built by these players rather than traditional electric utilities.

A major institutional problem for QFs and IPPs has been their ability to enter the competitive marketplace when the utility industry enjoys considerable market power (State-granted monopolies, ownership of transmission facilities, etc.). The allowance system may work to the independent power industry's disadvantage in that the predominant sellers of the emissions allowances that QFs and IPPs will need in order to build power plants will be the very utilities that they are seeking to challenge in the increasingly competitive generation market. Thus, to this fledgling industry, emissions trading resembles yet another potential bottleneck or entry barrier.

Rather than adopting a regulatory structure to police the evolution of a trading regime, the Committee chose to implement a periodic, mandatory "tap" (withholding by EPA) on all operating allowances, the majority of the tap to be auctioned annually to any interested buyers. In addition, the Committee creates an early (March 1992) auction, at which allowances from any year may be offered for sale at the option of the seller. To facilitate projects financed by "project financing" a contingency guarantee was set up to assure access to allowances prior to the auctions under the bill.

The NO₅x reduction program.—The title does not use an allowance system to reduce NO₅x EMISSIONS. INSTEAD, IT DIRECTS EPA TO ESTABLISH EMISSION RATES BASED ON LOW-NO₅x BURNERS FOR UNITS THAT USE COAL TO GENERATE ELECTRICITY THAT THE COMMITTEE BELIEVES WILL BRING NO₅x EMISSIONS AT LEAST 2.5 MILLION TONS BELOW THE EMISSION LEVELS EPA PROJECTS FOR THE YEAR 2000.

The bill does allow sources to opt into the allowance system voluntarily, in which case the sources can receive NO₅x ALLOWANCES. IN STATES THAT REQUIRE LEAST-COST UTILITY PLANNING, THESE NO₅x ALLOWANCES CAN BE TRADED FOR SO₂ ALLOWANCES, AND VICE-VERSA, AT A RATIO OF 1.5 NO₅x ALLOWANCES PER 1.0 SO₂ ALLOWANCE. THE 1.5-TO-1 RATIO REFLECTS THE BELIEF OF MOST EXPERTS THAT UNIT-FOR-UNIT, SO₂ EMISSIONS MAKE A GREATER CONTRIBUTION TO ACID DEPOSITION THAN NO₅x EMISSIONS.

Other key features of title V

"Growth" allowances for clean utilities.—The title contains a "greenfield cap," which provides that new utility units must purchase emission offsets before starting operations. This poses a potential problem for existing utilities with low emission rates. Utilities that are already clean could find it difficult to extract significant emission allowances from their existing units to transfer to new units. To address this problem, the bill provides a large pool of allowances available to clean utilities.

Adjustment to preserve the 8.9 million cap.—Depending on the allowance elections made by affected units, the number of allowances to be awarded under the allocation formulas in the title could exceed 8.9 million. If this happened, the cap on SO₂ EMISSIONS IN THE TITLE WOULD BE EXCEEDED. THE BILL SEEKS TO INSURE AGAINST THIS POSSIBILITY BY REQUIRING EPA TO ISSUE NO MORE THAN 8.9 MILLION ALLOWANCES EACH YEAR TO UTILITIES, WITH LIMITED EXCEPTIONS FOR CERTAIN ALLOWANCES GENERATED THROUGH CONSERVATION AND USE OF RENEWABLE ENERGY. IF THE ALLOWANCES THAT WOULD OTHERWISE BE ISSUED UNDER THE TERMS OF THE TITLE EXCEED 8.9 MILLION, EPA MUST MAKE PRO RATA ADJUSTMENTS TO REDUCE THE TOTAL TO 8.9 MILLION. IN EFFECT, THIS PROVISION GUARANTEES THAT NEITHER THE EXTRA ALLOWANCES FOR CLEAN UTILITIES NOR OTHER PROVISIONS GRANTING ALLOWANCES IN THIS TITLE VIOLATE THE CAP.

Incentives for scrubbing.—The title contains several incentives intended to encourage utilities to reduce their emissions by installing or increasing the use of flue gas "scrubbers" on plants that continue to burn high-sulfur coal, rather than by switching fuels. The incentives include a one-year delay in the First Phase compliance date for units that scrub (with the lost tonnage to be recouped by the unit over the next four years), bonus allowances awarded to First Phase units that scrub their emissions to a rate below 1.2 lbs/mmBtu (with the lost tonnage to be recouped by lowering every First Phase unit's allowances by 6 percent), and

early allowances award to First Phase units that use control technology prior to beginning of the First Phase. These provisions benefit mine workers and companies selling high-sulfur who fear that the title could cause many utilities to switch from high-sulfur coal to low-sulfur coal to lower emissions, thus jeopardizing the future of high-sulfur coal mines.

As discussed earlier, the Committee is greatly concerned about the projected job loss under H.R. 3030 in the high sulfur coal industry, particularly in the States of Ohio, West Virginia, Illinois, Indiana, and Pennsylvania. All of these States produce high sulfur coal, not only for utility markets in their States, but also for utilities in other States, like Florida and Georgia. Unfortunately, they are not able to influence those out-of-State utilities that obviously must be concerned about their customers and their PUCs. With Force Majeure clauses in their coal contracts, they might terminate a high sulfur contract in favor of some other approach, all to the detriment of the other States and their miners.

As reported, H.R. 3030 seeks to mitigate these possibilities through the encouragement of technology. These technology incentives should result in a significant reduction in job loss, although not close to 100 percent. These technology incentives are designed not only to protect high sulfur coal miners, but to prevent socioeconomic decline in regions dependent on high sulfur coal mining.

Incentives for conservation and renewable energy.—The title includes several incentives for conservation and renewable energy. The title prohibits utilities in a State from trading NO₅x EMISSION REDUCTIONS AGAINST SO₅₂ REDUCTIONS (OR VICE-VERSA) UNLESS THE STATE HAS ADOPTED RATE-MAKING PROCEDURES THAT REWARD ENERGY CONSERVATION. ALSO INCORPORATED ARE PROVISIONS THAT AWARD ALLOWANCES TO UTILITIES THAT UNDERTAKE ENERGY CONSERVATION OR DEVELOP RENEWABLE ENERGY RESOURCES IN ADVANCE OF REGULATION UNDER THE ACID RAIN TITLE.

Voluntary opt-in to the allowance system.—The title provides that a source that is not initially part of the allowance system is permitted to opt in and receive allowances if it voluntarily assumes a cap on its total emissions. In general, the cap will be based on the source's 1985 emission rate and its 1985 to 1987 operating levels. Such a source can sell or trade allowances if it reduces pollution below 1985 levels.

The purpose of this provision is to reduce overall compliance costs. In cases where an industrial source can lower SO₅₂ EMISSIONS MORE CHEAPLY THAN A UTILITY UNIT, THE INDUSTRIAL SOURCE CAN OPT INTO THE ALLOWANCE PROGRAM, REDUCE SO₅₂ EMISSIONS, AND SELL ALLOWANCES AT A PROFIT TO THE UTILITY UNIT. THE OPT-IN PROVISION SHOULD BE IMPLEMENTED IN A WAY THAT INSURES THAT IT IS "TONNAGE NEUTRAL"—I.E., DOES NOT INCREASE OR DECREASE THE SO₅₂ OR NO₅x EMISSIONS THAT WOULD OCCUR WITHOUT THE OPT-IN OPTION. FOR THIS REASON, NO ALLOWANCES CAN BE AWARDED TO OPT-IN SOURCES THAT REDUCE THEIR EMISSIONS THROUGH REDUCED UTILIZATION OR SHUTDOWN EXCEPT UNDER CERTAIN CIRCUMSTANCES. THESE ARE EMISSION REDUCTIONS THAT ARE EXPECTED TO OCCUR WITHIN THE NONUTILITY SECTOR ANYWAY, SO REWARDING THEM WITH ALLOWANCES WOULD ACTUALLY INCREASE AGGREGATE EMISSIONS. LIKEWISE, NO ALLOWANCES SHOULD BE AWARDED TO OPT-IN SOURCES THAT REDUCE EMISSIONS TO COMPLY WITH OTHER REQUIREMENTS OF THE ACT, EXCEPT THOSE IN SECTION 112 AND THIS TITLE. SUCH REDUCTIONS WOULD ALSO OCCUR IN THE ABSENCE OF THE OPT-IN OPTION.

Restrictions on interregion transfers.—The title permits transfers of allowances only within each of the two major geographical regions in the U.S., as defined by rule by EPA. The restriction applies to all "transfers," whether by sale, auction, or through the mechanism of a reserve. The provision, however, does not apply to transfers to new units.

SECTION-BY-SECTION ANALYSIS

Section 501. Acid deposition control

Section 501 adds a new Title V—Acid Deposition Control—to the Clean Air Act, consisting of new sections 501 through 521.

New section 501. Findings and purpose.—This new section contains the findings and purposes of the acid deposition control program. In summary, the findings provide that emissions of SO₂ and NO_x are being transformed into acid deposition that represents a threat to natural resources, ecosystems, materials, visibility and health.

With respect to SO₂, the purpose of this title is to reduce emissions sufficiently to achieve a 10-million-ton reduction relative to 1980 levels. This will be accomplished under this title by reducing utility SO₂ emissions to 8.9 million tons. Since nonutility emissions are expected to decline by 1.5 million tons from 1980 levels by the year 2000, the combined reductions will equal 10 million tons.

With respect to NO_x, the purpose of this title is to reduce emissions of NO_x from coal-fired electricity generation units by at least 2.5 million tons from the level of emissions of NO_x expected from such sources in 2000.

It is also the purpose to Title V to encourage energy conservation, renewable energy, and pollution prevention as long range strategies for reducing air pollution and other adverse impacts of energy production and use; and to mitigate the socioeconomic effects of the reduction program.

Emission reductions under the title will be achieved in two phases—phase one reductions are required after December 31, 1995, and phase two reductions are required after December 31, 2000.

New section 502(a). Definitions.—This new section contains the definitions and meanings of the terms used in this title. Several key definitions are discussed below.

Unit.—This term refers to a device that uses fossil fuels to produce steam.

Affected unit.—This term refers to a unit subject to regulation under the allowance system established under this title.

Electric utility steam generating unit.—The definition of “electric utility steam generating unit” conforms with the definition in Title III (the Air Toxics Title), except that it excludes existing “qualifying small power production facilities” and existing “qualifying cogeneration facilities” under the Public Utility Regulatory Policies Act of 1978 (PURPA) that sell power pursuant to a long-term contract executed on or before December 31, 1989, or which have an order from the State regulator or agency, on or before December 31, 1989, directing the purchasing utility to execute such a contract with such a facility. Almost all of these sources were included in EPA’s industrial inventory, and are thus not counted as part of the 8.9 million ton cap that applies to the utility sector. Under Title V electric utility, emissions are limited, industrial unit emissions are not. The exclusion of these sources from the definition of “existing electric utility steam generating unit” conforms the bill with EPA’s calculation of the number of allowances to be allocated to utilities and the number of emissions expected from industrial sources. These sources are still permitted to opt in to the allowance system under Section 509 as are other industrial sources.

Existing electric utility steam generating unit.—This term refers to an electric utility steam generating unit that commences commercial operation before enactment.

New electric utility steam generating unit.—This term refers to any electric utility steam generating unit that is not an existing electric utility steam generating unit.

Allowances.—This term “allowance” means an authorization to emit a ton of SO₂ (or NO_x, in the case of NO_x allowances issued under Section 509) in any single calendar year.

Baseline.—The term “baseline” in most cases means the annual average fossil fuel use at a unit, calculated as a three-year average over the period 1985 through 1987, based on data reported on DOE Form 767. Except where noted in this title, “annual” means the period from January 1 through December 31 for the year. Where this data is unavailable, the baseline is the 1985 fuel use according to the 1985 NAPAP Emission Inventory, Version 2.

It is the intent of this section that the Administrator make adjustments in the baseline if necessary to account for natural disasters, such as tornadoes or accidents, such as explosions that occurred at one unit and that affected operations at other units located at the same plant. An example is the explosion at the Monroe Power plant in Monroe, Michigan in 1986.

For units that commenced commercial operation in or after 1985, the baseline is assumed to be fuel use at a 65 percent capacity factor, except that owners or operators may petition the Administrator to establish an alternative baseline. Such an alternative baseline would be based upon fuel use in the three consecutive calendar years following the year the unit entered commercial operation and prior to enactment or, if that is not feasible, a representative year after 1985.

Clean coal technology.—This term refers to any coal combustion technique that is not in widespread use; “repowering” is defined as a specific list of technologies. The Committee bill authorizes the Administrator and the Secretary of Energy to jointly expand the list of clean coal technologies in accordance with specific criteria.

While the Administrator determines whether a technology qualifies as a “repowering” technology, the choice of which technology to use remains a utility decision.

Actual 1985 emission rate.—This refers to the amount of SO₂ emitted per energy used in 1985, in lbs/mmBtu. The bill defines that rate as the rate “reported in *** the NAPAP Emissions Inventory, Version 2 (National Utility Reference File (NURF)), if applicable.” The rate is limited to the applicable rate under its implementation plan for 1985. If the unit commenced operation after 1985, the rate is based on a “representative year” as determined by the Administrator.

New section 502(b). Correction of data.—Subsection 502(b) requires the Administrator to correct factual errors, if any, in the NAPAP Emissions Inventory, Version 2. The Administrator is required, upon application or on his own motion, to correct such factual errors in the inventory before December 31, 1991. If the Administrator corrects an alleged factual error in the inventory, the determination is subject to judicial review; but the failure to correct any alleged factual error is not subject to judicial review. Foreclosing judicial review in the latter instance stems from the Committee's concern that judicial review of individual instances where the Administrator has decided not to make a correction would clog the courts and impede the Administration of the program. Nonetheless, the committee expects the Administrator to carry out the data correction function expeditiously and in good faith.

New section 503. Allowance program.—This new section established the emission allowance system that is the cornerstone of Title V. To ensure that the emissions reductions contemplated by this title are met, a limited number of emission allowances will be issued to affected sources for each calendar year based on a statutorily prescribed formula. An allowance is a Federal authorization to emit a ton of SO₂ in a specified calendar year or subsequent year if it is “banked,” i.e., not used in that specified year. Holders of these allowances are prohibited from emitting SO₂ unless they hold an equivalent number of allowances.

This section sets forth a very important requirement of this title. This is the requirement that provides that after December 31, 2000, no more than 8.9 million SO₂ allowances can be issued to electric utility steam generating units in any single calendar year with a limited exception for allowances generated through the use of conservation and renewable energy. This requirement limits SO₂ emissions from the utility sector 8.9 million tons annually (plus any emissions authorized by allowances banked from earlier years). It is the provision that insures that the emission reductions required by the bill are actually achieved.

Allocation of annual allowances.—Subsection (a) provides a general direction to the Administrator to issue annual allowances to affected units. It also provides that removal of an affected unit from commercial operation, whether prior to or after the date of enactment, shall not affect the unit's entitlement to allowances, except as provided in section 509.

EPA allowance system regulations.—Subsection (b) requires EPA to issue regulations implementing the allowance system within 18 months. In developing these regulations, the Administrator must consult with the Secretary of Energy, the Federal Energy Regulatory Commission, State ratemaking authorities, and others. The regulations must be reviewed every four years and, if necessary, amended.

The regulations must provide for the timely issuance of allowances, the effective function of the allowance system, and protection against fraud. Such regulation shall permit the transfer of the right to receive allowances prior to their issuance. The regulations must also restrict transfers of allowances to insure that allowances generated in one of the two major geographic regions in the country can be used only within the same region, except that inter-region transfers are permitted if the allowances are transferred to new units or among units owned or operated as of the date of enactment by the same person.

Paragraph (4), "Multiple Ownership," addresses the situation where a unit is jointly owned by more than one owner or operator or where an operator participates in a unit under a "life of unit" agreement or a passive lease. The bill provides that, unless the ownership agreement otherwise provides, each part-owner of a source shall receive allowances in proportion to its ownership share. For example, if the source is owned 40 percent by Owner A and 60 percent by Owner B, Owner A owns 40 percent of the allowances, and Owner B owns 60 percent of the allowances. The bill also requires that, unless the owners provide otherwise by contract, if (1) an owner is required by contract to pay for pollution control at the unit and (2) such pollution control creates allowances available for transfer, that such owner shares the ownership of the transferable allowances in proportion to his contribution to control costs. When there are multiple units with multiple owners, the intent of Congress is that the election made by the operator under Section 505(e)(2) for a specific generating unit shall apply to the entirety of that unit and any other units operated by that operator which are subject to the same paragraph of that section. The non-operating owners of such unit shall not be required to elect the same method for other units of which they are the operator.

The Committee intends the "life-of-the-unit" provision to apply to situations where a utility has a long-term, unit participation contract obligating it to pay a proportion of the total costs associated with a particular generating unit in exchange for a share of the unit's output, even if the contract contains an option for the participant to cancel the arrangement, so long as this option has not been exercised, one such contract now in force in Kansas, involves Kansas Municipal Energy Agency. Given the length of such unit participation contracts and the likelihood that they, in fact, are for the "life-of-the-unit," it is the Committee's intent that such a unit participant receive allowances as a "life-of-the-unit" contract holder, so long as it remains a participant in the unit.

Interpollutant trading.—Subsection (c) provides that if NO_{5x} ALLOWANCES ARE ISSUED UNDER SECTION 509, SUCH ALLOWANCES MAY BE TRADED FOR SO₅₂, ALLOWANCES, AND VICE VERSA, AT AN EXCHANGE RATE OF 1.5 POUNDS OF NO_{5x} FOR 1 POUND OF SO₅₂. BECAUSE NO_{5x} AND SO₅₂ ARE CRITERIA POLLUTANTS FOR WHICH HEALTH-BASED STANDARDS (NAAQS) HAVE BEEN SET UNDER SECTION 110, AND BECAUSE NO_{5x} MAY CONTRIBUTE TO THE FORMATION OF OZONE, NO_{5x}/SO_{5x} TRADES IN SO₅₂, NO₅₂, PM-10 OR OZONE NONATTAINMENT AREAS ARE SUBJECT TO APPROVAL BY THE ADMINISTRATOR. (ELIGIBILITY FOR INTERPOLLUTANT TRADING IS LIMITED BY SECTION 520 TO STATES WHERE THE STATE RATEMAKING AUTHORITY HAS UNDERTAKEN CERTAIN REGULATORY REFORMS.)

Allowance tracking system.—Subsection (d) provides that the regulations under this section must provide for an allowance tracking system. Allowance transfers become effective when written certification from both parties is received and recorded by the Administrator. The Administrator is required to perform such recordation within 14 working days. In order to insure electric reliability, such regulations shall not prohibit or affect temporary increases and decreases in emissions within utility systems or power pools that result from their operations, including emergencies and central dispatch, and such temporary emissions increases and decreases shall not require transfer of allowances among units nor shall it require recordation. Notwithstanding the

preceding sentence, the total tonnage of emissions in any calendar year (calculated at the end thereof) from each unit involved shall not exceed the allowances allocated to the unit for the calendar year concerned and issued to the owner or operator of the unit for that year, plus or minus allowances transferred to or from the unit for such calendar year or carried forward to that year from prior years. All persons holding allowances or involved in allowance transfers must file annual reports with the Administrator.

The Committee does not intend that any affected unit or affected source be subject to any penalty for “exceeding” its allowances for a given calendar year until that year has ended and all transfers of allowances applicable to that year have been completed within a reasonable time after the end of that year. In other words, the bill does not provide that at any given time in a calendar year a unit may emit no more than the amount that is authorized by the allowances that it holds at that time. The only time at which comparison of a unit's emissions with its allowances is relevant is the end of the calendar year.

The Committee notes that section 503(d) provides that no allowance allocated to any unit for one year may be carried backward and added to allowances in an earlier year.

This subsection makes it clear that allowances are annual; temporary increases and decreases in emissions within utility systems or power pools do not require allowance transfers or recordation so long as the total tonnage emitted in any year matches allowances held for that year. Thus, utilities must “true up” at year-end to ensure that allowances match emissions for each unit.

New electric utility steam generating units.—Subsection (e) establishes the “cap” on new electric utility steam generating units. After December 31, 2000, each such unit must hold allowances equal to the annual tonnage of SO₂ EMITTED BY THE UNIT. SINCE NEW UNITS ARE NOT ISSUED ALLOWANCES UNDER THIS TITLE, THIS SUBSECTION REQUIRES NEW UNITS TO OBTAIN THE ALLOWANCES WHICH ARE INITIALLY HELD BY EXISTING UNITS. NEW UNITS MAY PURCHASE ALLOWANCES IN A VARIETY OF WAYS—DIRECTLY FROM OWNERS OR OPERATORS OF AFFECTED UNITS, AT THE AUCTION SET UP UNDER SUBSECTION (M), THROUGH THIRD PARTIES, OR THROUGH ANY OTHER MECHANISM THAT EVOLVES WITH THE PROGRAM.

Nature of allowances.—Subsection (f) provides that an allowance is “a limited authorization to emit SO₂ OR NO_x IN ACCORDANCE WITH THE PROVISIONS OF THIS TITLE.” ONCE ISSUED, THEY MAY BE USED, BANKED, SOLD, OR OTHERWISE TRADED BY THEIR OWNERS. WHILE CONGRESS RETAINS THE AUTHORITY TO TERMINATE OR LIMIT THE ISSUANCE OF ALLOWANCES IN THE FUTURE WITHOUT COMPENSATION, EPA IS NOT PERMITTED TO EXTINGUISH ALLOWANCES ONCE ISSUED FOR A GIVEN YEAR.

Receiving, holding or transferring allowances do not require permit modifications.

Prohibition.—Subsection (g) makes it unlawful to hold or transfer allowances in violation of the Administrator's regulations.

Issuance of first and second phase allowances.—Subsection (h) provides that First Phase allowances shall be issued promptly following the publication of regulations under the section. These regulations are due 18 months after enactment. Second Phase allowances must be issued within six months after the final list is published.

Subsection (i) makes it clear that for Second Phase, EPA is not permitted to issue more than 8.9 million tons of permanent annual SO₂ ALLOWANCES (EXCEPT THAT ADDITIONAL ALLOWANCES MAY BE ISSUED UNDER SECTION 509, UNDER WHICH INDUSTRIAL EMITTERS AND NO_x EMITTERS MAY BE GRANTED ALLOWANCES AND UNDER SUBSECTION (J). ALL AUTHORIZED ALLOWANCES MUST BE ISSUED.

The Administrator is required to publish, prior to December 31, 1991, an initial list of all Second Phase allowances to be issued. Prior to December 31, 1995 the Administrator must publish a final list of allowances for the applicable years of Second Phase. Prompt notification and documentation are crucial to making the whole allowances system work well. Early, accurate

information regarding the number of allowances available will facilitate both early compliance and an efficient allowance marketplace.

An accounting system is set up to ensure that the 8.9 million ton cap is not breached, and to ensure that certain additional allowances allocated for early use renewable energy and conservation and for provisions for small systems are offset by reductions elsewhere.

The 8.9 million ton cap is divided into two caps: 3.98 million tons for clean units (units with 1985 emission rates less than 1.2 lbs/mmBtu) and small units (units smaller than 75 MWe); and 4.92 million tons for large units (75 MWe or greater) with 1985 emission rates of 1.2 lbs/mmBtu or above. The cap is divided into this way in order to ensure that the Committee's decision is maintained regarding the appropriate division of allowances between these two broad categories of sources.

Within each category, to the extent that the formulas in Section 505 for allocating allowances result in allocations greater than the 3.98 or 4.92 million tons caps, the allowances allocated to all sources within the category must be adjusted to meet the overall caps. The adjustment for any unit within each of the two caps is in the same proportion to the total adjustment as the unit's allocation of pre-adjustment allowances is to the total pre-adjustment allocation of all units under the relevant cap.

Within the 3.98 category, 75,000 allowances are to be set aside in a Reserve for Gas Supply Interruptions for the interruptible gas unit provision in section 516(c).

Energy conservation and renewable energy.—Subsection (j) gives allowances to utilities that avoid early SO₂ EMISSIONS BY INVESTING IN ENERGY CONSERVATION OR RENEWABLE ENERGY FACILITIES IN THE YEARS BEFORE COMPLIANCE WITH THE SO₂ REQUIREMENTS OF THIS TITLE.

In order to receive these allowances the utility has to have an affected unit under this title, a least-cost plan, and in the case of utilities that are regulated by a State regulatory authority, the regulatory authority has to have implemented regulations that ensure that the net income of the utility is at least as high as the net income would have been without the conservation investments.

Allowances can start being earned under this subsection on January 1, 1992. No further allowances may be earned after the utility comes under First or Second Phase SO₂ REGULATIONS.

The Administrator will issue the allowances annually to utilities that apply for them during the period after promulgation of regulations for this subsection. The first 200,000 allowances will be for use only after January 1, 2001. The second 200,000 allowances will be for use only after January 1, 2006. These allowances can only be used at a utility that has an approved least cost plan. Utilities receiving these allowances can sell or trade these allowances in the period before they can be used.

Tons of avoided emissions for conservation programs are calculated by multiplying the number of kilowatt hours saved times .004 and dividing by 2000, a factor that represents an avoided emission rate of .4 pounds of SO₂ PER MILLION BTU OF FUEL.

Tons of avoided emissions for renewable energy facilities are calculated by multiplying the number of kilowatt hours produced times .004 and dividing by 2000.

No allowances shall be issued under this subsection for programs that are exclusively informational or educational in nature or for conservation or renewables that were operational before January 1, 1992. No allowances shall be issued for conservation or renewables that were operational before Jan. 1, 1992. This does not disqualify conservation programs that started before 1992, only those conservation measures that become operational before 1992 are disqualified.

Nothing in this subsection precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

Reserves.—Subsection (k) establishes the allowance reserves to cover the allowances issued under the special provisions for small systems in Section 505(c)(2) and the renewable energy and conservation provisions in subsection (j). The small system provisions are environmentally neutral relative to H.R. 3030 as introduced because the small system reserve is compensated for by additional First Phase reductions required at DOE plants under Section 518.

The Renewable and Conservation Reserve will contain 400,000 allowances. As soon as the Administrator has promulgated regulations for subsection (j) 300,000 of these allowances are compensated for by deducting 30,000 tons per year from the 8.9 million tons of Second Phase allowances during the first ten years of Second Phase, 20,000 tons per year come from the 4.92 million allowance pool; 10,000 tons per year come out of the 3.98 million allowance pool. The other 100,000 tons are presumed to be compensated for by SO₂ REDUCTIONS WHICH RESULT FROM THE RENEWABLE AND CONSERVATION PROGRAM AND THEREFORE ARE TONNAGE NEUTRAL AND MAINTAIN THE BILL'S 10 MILLION TON REDUCTION. THIS WAS A DECISION OF THE COMMITTEE WHICH ESTIMATED THAT SUBSECTION (J) WOULD RESULT IN A REDUCTION IN AN ADDITIONAL 100,000 TONS OF SO₂ EMISSIONS IN THE PERIOD BEFORE THE TONNAGE LIMITATIONS WENT INTO EFFECT AND THEREFORE DID NOT HAVE TO BE SO ACCOUNTED FOR. IF LESS THAN 400,000 ALLOWANCES ARE EARNED, THE DIFFERENCE BETWEEN THE NUMBERS EARNED AND 400,000 WILL REVERT TO WHERE THEY COME FROM IN THE YEAR 2011.

Contingency guarantees for IPPs.—Subsection (l) provides a mechanism for guaranteeing that certain independent power producers can purchase allowances for new units. IPPs have a special need for such guarantees because they do not operate existing units and so cannot finance their growth through adding controls to existing units. While the requirements applicable to an independent power producer in order to exercise its contingency guarantee are substantial, the Committee intends that EPA construe such terms as “good faith bid” and “good faith efforts” reasonably. The Committee's intent in requiring such “good faith efforts” is to prevent passive reliance on the guarantee once it has been issued. The Committee does not intend that guarantee recipients end their reasonable search for needed allowances in the marketplace once the guarantee is in hand; by the same token, the guarantee, once issued, should not be rendered ineffective unless the applicant's subsequent efforts to obtain the needed allowances indicate a substantial lack of good faith.

Eligible IPPs are those that apply for financing between January 1, 1990 and March 31, 1992, and that are unable to purchase the required allowances at a price of \$750 per allowance before the latter date. The guaranteed price is \$1500 per ton adjusted for inflation. IPPs lose their eligibility for guaranteed allowances if they do not make a good-faith bid in the section 519 auction or do not continue to make good-faith efforts to purchase the required allowances.

To supply the guaranteed allowances, the Administrator is required to issue the allowances to affected units from the 100,000 allowances per year set aside under Section 519(c)(1). Units exercising the contingency guarantee have first priority to this reserve.

Allowances for early reductions.—Subsection (m) requires the Administrator to issue allowances for early reductions to units subject to the First Phase. To qualify for allowances, the reductions must: (1) result solely from installation or additional use of a system of technological controls installed after enactment that reduces emissions by at least 70 percent, (2) not be required under other provisions of the Act (such as part D of Title I), and (3) not be caused by reduced utilization. Systems of technological control such as coal cleaning plus scrubbing would qualify for credit so long as the combination exceeded the 70 percent emission reduction. Switching fuels would not. One allowance shall be awarded for each ton of early SO₂ REDUCTION ACHIEVED.

New section 504. First phase sulfur dioxide emission reduction program.—This new section sets forth the First Phase SO₂ REDUCTION PROGRAM. THIS PROGRAM BEGINS AFTER DECEMBER 31, 1995, AND ENDS ON DECEMBER 31, 2000.

First phase affected units.—Subsection (a) identifies the units subject to the First Phase SO₂ REDUCTION PROGRAM. THE AFFECTED UNITS ARE ALL EXISTING FOSSIL FUEL-FIRED STEAM ELECTRIC GENERATING UNITS WHICH ARE LISTED IN TABLE A OF THE BILL OR WHICH ARE LARGER THAN 100 MWE AND HAVE AN SO₂ EMISSION RATE OF 2.5 LBS/MMBTU OR GREATER DURING ANY YEAR AFTER ENACTMENT AND BEFORE DECEMBER 31, 2000.

First phase emission tonnages.—Subsection (b) prescribes the allowances awarded to affected units. These units are required to hold allowances after December 31, 1995, in the tonnage equivalent of a 2.35 lbs/mmBtu emission rate for SO₂ ON AN ANNUAL AVERAGE BASIS. (THE TONNAGE EQUIVALENT IS DETERMINED BY MULTIPLYING THE 2.35 LBS/MMBTU RATE TIMES THE BASELINE, WHICH IS THE ANNUAL AVERAGE FUEL CONSUMPTION FOR 1985–1987.)

Authority to substitute units.—Subsection (c) provides that owners or operators of First Phase units may apply to the Administrator to reassign their First Phase reduction requirements to one or more alternative fossil fuel-fired units.

Administrator's action on a substitution proposal.—Subsection (d) sets out the procedures under which the Administrator shall act on substitution applications under subsection (c).

Delayed compliance.—Subsection (e) provides an incentive to install technological emission controls by giving units that install such controls an additional year to meet the allowance requirements established under the First Phase. To qualify, the technological controls must reduce emissions of SO₂ BY AT LEAST 70 PERCENT AND BE INSTALLED AFTER ENACTMENT. UNITS RECEIVING THE ONE-YEAR EXTENSION MUST OVERCONTROL DURING THE REMAINING FIRST PHASE YEARS TO A LEVEL SUFFICIENT TO OFFSET THE EXTRA TONNAGE OF SO₂ EMITTED DURING THE EXTENSION YEAR. THIS IS THE ONLY INSTANCE IN THE BILL IN WHICH “BACKWARDS BANKING” IS PERMITTED. UNITS THAT RECEIVE ALLOWANCES FOR EARLY REDUCTIONS UNDER SECTION 503(M) CANNOT DELAY THEIR COMPLIANCE.

Two-for-one allowance program.—Subsection (f), provides additional allowances as incentives for the installation after the date of enactment of pollution control technology. A Two-For-One Reserve is set up to contain approximately 1.75 million tons of allowances. In order to maintain First Phase reductions equivalent to those in H.R. 3030 as introduced, the First Phase requirements, except the DOE units, were reduced by 6 percent. Thus, the size of the reserve is equivalent to 6 percent of the allowed emissions for all First Phase units, except the DOE units. These additional allowances are available only to units which reduce to below 1.2 lbs/mmBtu. The additional allowances are calculated as the difference between what the unit's emissions would be at a 1.2 lbs/mmBtu rate, and the unit's First Phase emissions at its lower rate. To the extent that more owners or operators wish to take advantage of this provision than could be accommodated within the Two-for-One Reserve, the Administrator must allocate the extra allowances equitably.

The Table of Allowances to be allocated to units affected in First Phase was revised in accordance with EPA's revised specifications that were submitted to the Committee.

New section 505. Second phase sulfur dioxide emission reduction program.—This section sets forth the Second Phase SO₂ EMISSION REDUCTION PROGRAM, WHICH BEGINS AFTER DECEMBER 31, 2000. IT ESTABLISHES THE FORMULAS FOR DETERMINING THE ALLOWANCES TO BE ALLOCATED TO DIFFERENT TYPES OF AFFECTED UNITS DURING THE SECOND PHASE. THESE ALLOWANCE ALLOCATIONS ARE SUBJECT TO ADJUSTMENT UNDER THE PROVISIONS OF SECTION 503.

Second phase affected units.—Subsection (a) identifies the units subject to the Second Phase SO₂ EMISSION REDUCTION PROGRAM. THE AFFECTED UNITS ARE ALL ELECTRIC UTILITY STEAM GENERATING UNITS, AS DEFINED IN SECTION 502, EXCEPT 100 PERCENT GAS UNITS.

Affected units 75 MWe or above emitting 1.2 lbs/mmBtu or above.—Subsection (b) provides the formula for allocating Second Phase allowances to affected units with capacity equal to or larger than 75 MWe and with 1985 emission rates equal to or greater than 1.2 lbs/mmBtu. Such units will receive SO₂ ALLOWANCES EQUAL TO THE PRODUCT OF 1.2 LBS/MMBTU MULTIPLIED BY THE UNIT'S BASELINE.

Affected units below 75 MWe emitting 1.2 lbs/mmBtu or above.—Subsection (c) provides the formula for allocating Second Phase allowances to affected units with capacity below 75 MWe and with 1985 emission rates equal to or above 1.2 lbs/mmBtu. As a general rule, such units will receive SO₂ ALLOWANCES EQUAL TO THE PRODUCT OF 1.2 LBS/MMBTU MULTIPLIED BY THE UNIT'S BASELINE.

A special election is provided for units that are owned by electric utilities that have a total generating capacity of 500 megawatts or less. Owners or operators of small units with high emission rates that are in small systems must elect whether to participate in the Small Systems Reserve by January 1, 1998, and can cease participation at any time. During the period of the election, the small units will receive allowances based upon 1.2 lbs/mmBtu times their respective baselines which will cover a portion of their emissions. Such allowances shall be treated as used by the unit and may not be transferred or banked for as long as the election remains in effect. The difference between their allowances and their emissions will be deducted from the Small Systems Reserve. Beginning in 1998, the Administrator must forecast, and beginning in 2001, the Administrator must report annually, on the status of the Reserve and the projected period for which Reserve allowances will remain available. The program shall be terminated once the Reserve is depleted.

If the Administrator determines that the Reserve is more than adequate to provide for elections by eligible small systems throughout the period for which the election is available, the Administrator is authorized to permit certain larger utility systems to elect to participate in the Small System Reserve. In order to be eligible to participate, a large system must (1) have at least 20 percent of its fossil fuel-fired steam electric generating capacity equipped with a technological system of continuous emission reduction as of the date of enactment; (2) have at least 10 percent of its fossil fuel-fired steam electric generating capacity comprised of units smaller than 75 MWe, and (3) have all of its large units (those greater than 400 MWe) that are not already so equipped be determined by the Administrator to be difficult or very difficult to retrofit with a technological system of continuous emission reduction that achieves high removal efficiency. Units in large systems which the Administrator authorizes to participate in the small system reserve cannot emit in excess of 2.5 lbs/mmBtu during the period of the election.

Affected units emitting below 1.2 lbs/mmBtu.—Subsection (d) sets out the basic allocation formula for affected units emitting SO₂ EMISSIONS AT A RATE BELOW 1.2 LBS/MMBTU. THIS FORMULA PROVIDES ALLOWANCES EQUAL TO THE PRODUCT OF THE UNIT'S 1985 EMISSION RATE MULTIPLIED BY ITS BASELINE.

The subsection also provides that electric utility steam generating units that burned only natural gas during 1985 through 1987 and that continue to burn only natural gas after December 31, 2000, shall not be affected units.

There are two special allowance rules contained in this subsection.

The first provides that two utilities with ultra-clean plants with low capacity factors in 1985 are granted additional allowances.

The second provides allowances at the lesser of its allowable SO₂ EMISSION RATE OR 1.2 LBS/MMBTU, TIMES FUEL USE AT A 65 PERCENT CAPACITY FACTOR, FOR ONE UNIT THAT CONVERTED FROM OIL TO COAL BETWEEN

1985 TO 1987 UNDER FEDERAL ORDER PURSUANT TO THE POWER PLANT AND INDUSTRIAL FUEL USE ACT OF 1978.

Election for units emitting below 1.2 lbs/mmBtu.—Subsection (e) establishes alternative allocation formulas for affected units emitting below 1.2 lbs/mmBtu. Such units may elect to receive allowances based on the formula in subsection (d) or this subsection. The alternative formulas are summarized below.

Coal units emitting at a rate of 0.6 lbs/mmBtu or less: These units may elect to receive allowances equal to the product of the more stringent of a 0.6 lbs/mmBtu rate or the rate in the applicable SIP (SIP rate) multiplied by the greater of the unit's fuel consumption at 60 percent capacity or 120 percent of baseline.

Coal units emitting above 0.6 lbs/mmBtu: These units may elect to receive allowances equal to the product of their 1985 emission rate multiplied by the greater of the unit's fuel consumption at 60 percent capacity or 120 percent of baseline.

Oil or gas units emitting at a rate of 0.6 lbs/mmBtu or less: These units may elect to receive allowances equal to the product of the more stringent of a 0.6 lbs/mmBtu rate or the SIP rate multiplied by 120 percent of baseline. However, no unit which used more than 90 percent natural gas during the period from 1980 through 1989 can make an election under this subsection.

Oil or gas units emitting above 0.6 lbs/mmBtu: These units may elect to receive allowances equal to the product of their 1985 emission rate multiplied by 120 percent of baseline.

Units under construction.—Subsection (f) allocated allowances as set forth in Table B to certain units under construction. For purposes of applying the adjustments in section 503(i), the units under this subsection shall be treated as having 1985 emission rates of 1.2 lbs/mmBtu or greater.

Special baseline election.—Subsection (g) provides that units in any State that experienced 25 percent population growth between 1981 and 1988 and had an installed generation capacity of more than 30,000 megawatts in 1988, may use an alternative baseline for purposes of calculating allowances under this section. Florida is the only State which meets these criteria. The baseline may be any three consecutive years between 1980 and 1989. Each unit within a utility system or within the State will have the ability to select its baseline years.

The Administrator must withhold 40,000 allowances from the auction pool established under Section 519(b) and shall issue additional allowances under this subsection out of these 40,000 allowances. The Administrator must ensure that subsection (h) does not utilize more than 40,000 allowances. The Administrator must calculate the additional allowances that would be allocated under this subsection, and if it exceeds 40,000 tons, each unit covered by this paragraph will receive proportionately fewer allowances under this subparagraph. If subsection (h) utilizes less than 40,000 allowances, the remaining allowances shall be distributed to each utility within the States on the basis of such unit's nameplate capacity.

Interruptible gas.—Subsection (h) describes the circumstances in which a unit that burned more than 90 percent natural gas during 1980 through 1989 may be awarded allowances to the extent available from the reserve for gas supply interruptions established under section 503. Such a unit may receive allowances from the reserve to cover excess emissions if the excess emissions result from a gas supply interruption under an interruptible contract or State law. The interruption must be triggered by bad weather or other unusual factors not under the control of the unit. In addition, during the period of the interruption, the unit must not emit SO₂ AT A RATE GREATER THAN THE LOWER OF 0.5 LBS/MMBTU OR THE SIP RATE. NO UNIT MAY RECEIVE ALLOWANCES FROM THE RESERVE AFTER THE TOTAL PERIODS OF INTERRUPTION FOR THAT UNIT IN ANY CALENDAR YEAR EXCEED 25 PERCENT OF THE CALENDAR YEAR.

The unit must continue to burn natural gas more than 90 percent of the time during any period other than during an interruption. If the unit fails to meet any of the requirements, its owner or operator will have to obtain allowances for any excess emissions.

The additional allowances awarded under this subsection are available only so long as allowances remain in the reserve for gas supply interruptions. If this reserve is exhausted, units that would otherwise qualify for allowances from the reserve are required to obtain allowances to cover the excess emissions from other sources.

New section 506. Nitrogen oxides emission reduction program.—This new section contains the reduction requirements for NO₅x SOURCES.

Within three years of enactment, the Administrator must establish by rule emission rate standards for existing coal-fired electric utility steam generating units that are larger than 75 MWe based on low-NO₅x BURNER COMBUSTION TECHNOLOGY. SUCH STANDARDS ARE EXPECTED TO BE SUFFICIENT TO REDUCE NO₅x EMISSIONS BY APPROXIMATELY 2.5 MILLION TONS BELOW PROJECTED EMISSIONS FOR THE CALENDAR YEAR 2000. THE STATUTORY 2.5 MILLION TON REQUIREMENTS MUST BE MET THROUGH CHANGES IN THE NO₅x NSPS, IF NECESSARY.

The Administrator is authorized to reduce emissions further, up to four million tons, if he finds that further reductions are needed and cost-effective.

For cell burners, for purposes of meeting the 2.5 million ton goal, any emission rate requirement must be based on commercially available burner technology. The Administrator may not require reductions from cyclone or wet-bottom boilers in order to meet the 2.5 million ton goal. However, he may require reductions from those units in order to meet the 4-million-ton goal if he finds that methods are available for reducing emissions from such boilers that are as cost-effective as the application of low-NO₅x BURNER TECHNOLOGY IN THE CASE OF WALL-FIRED OR TANGENTIALLY-FIRED BOILERS. THE SECTION ALSO MAKES CLEAR THAT CYCLONE BOILERS AND WET-BOTTOM BOILERS ARE EXCLUDED FROM CONTROLS UNLESS COST-EFFECTIVE REDUCTION METHODS BECOME AVAILABLE.

The Administrator is authorized to require additional NO₅x EMISSION REDUCTIONS TOTALING 4.0 MILLION TONS, IF HE FINDS THAT THEY ARE NEEDED AND COST EFFECTIVE.

New section 507. Permits and compliance plans.—This new section establishes the permits and planning requirements for the acid deposition control program. The Committee notes that the Title V requirements to emit only in accordance with allowances held is only part of the permit issued under Title IV. The permit will also include the source's requirements under the rest of the Act, including SO₅2 EMISSION LIMITATIONS FOR PURPOSES OF MEETING NSPS OR FOR ATTAINING AND MAINTAINING THE NAAQS. ALLOWANCES CANNOT BE USED TO EMIT AT LEVELS THAT WOULD VIOLATE ANY OTHER REQUIREMENT OF THE PERMIT. NOR CAN THE ADMINISTRATOR TAKE AWAY ALLOWANCES AS A MEANS OF CHANGING PERMIT REQUIREMENTS THAT ORIGINATE OUTSIDE TITLE V. CHANGES IN NSPS OR NAAQS, FOR EXAMPLE, CANNOT BE IMPLEMENTED THROUGH THE ALLOWANCE PROGRAM.

Permit program.—Subsection (a) sets out the required elements of permits issued under this section. As a general rule, the permits must comply with the requirements of Title IV, except as otherwise provided. One exception is stated in section 503(f), which states that nothing in section 507 shall be construed as affecting any allowances issued or authorizing a permitting authority to establish conditions affecting allowances. Banking of allowances and transfers of allowances shall not require modification of the permit. The permits must prohibit emissions in excess of the total allowances held by the affected unit. The permits must also prohibit exceedances of applicable emission rate limitations and violation of any permit terms. Permits under this section shall be for a five-year term.

Compliance plan.—Subsection (b) requires affected units to file compliance plans, which must meet the requirements of Title IV, with their permit applications. Where there are multiple units at a single source, the plan shall cover all such units.

First phase permits.—Subsection (c) requires the Administrator to issue regulations establishing a Federal permit program for First Phase units within 18 months after enactment. Within 27 months after enactment, the affected units must submit a permit application and compliance plan in accordance with the regulations. Such applications and compliance plan shall be enforceable against the units. Within six months thereafter, the Administrator shall determine whether to approve or disapprove the compliance plan. (Under subsection (i), it is unlawful to operate under the terms of a compliance plan that has been disapproved.) When the Administrator issues a permit to an affected unit, such permit shall supersede the application and compliance plan.

The subsection contains special provisions that apply when an affected source proposes to comply with its tonnage limitations by reducing the utilization of the unit by 20 percent or more. In such cases, the unit must identify the units that will replace the generation of the affected unit. Those units then become affected units, with allowance equal to the product of each unit's 1985 emission rate multiplied by the unit's baseline. This exemption also includes an exemption from any fees under Title I that are imposed before Title IV fees to into effect.

Governor's approval.—Subsection (d) requires First Phase affected units to request the Governor's approval of their permit applications and compliance plans. The conditions imposed by the Governor as part of any approval shall be incorporated into the First Phase permit, unless the Administrator determines that the conditions are inconsistent with the Act or other compelling national interest. The Governor may preclude the use of out-of-state coal as a condition of the approval if required by State law.

Second phase permits.—Subsection (e) requires States to submit permit programs for implementing the Second Phase permit requirements, in accordance with the procedures of Title IV. Upon approval of the State permit program, the Administrator shall suspend the Federal permit program in place for that State.

The subsection also establishes a timetable for the Second Phase permits for affected units. These units must submit their permit applications and compliance plans before January 1, 1996. The State (or the Administrator in the case of States without approved permit programs) must then issue the permit within two years. As is the case for First Phase permits, the permit application and compliance plan is enforceable against the unit until superseded by a permit.

Units subject to NO₅x limitations.—Subsection (f) establishes the procedures for issuing permits to units subject to NO₅x LIMITATIONS UNDER SECTION 506. THESE UNITS MUST SUBMIT PERMIT APPLICATIONS AND COMPLIANCE PLANS BY JANUARY 1, 1998. THE PERMITTING AUTHORITY MUST ACT ON THE PERMIT APPLICATION AS PROVIDED IN THE PERMIT PROGRAM UNDER SUBSECTION (E).

New units.—Subsection (g) establishes the procedures for issuing permits to new units subject to the cap on new units under section 503. Such units must submit permit application and compliance plans by December 31, 1998, or two years before commencing commercial operation, whichever is later. The permitting authority must act on the permit application as provided in the permit program under subsection (e).

Amendment of application and compliance plan.—Subsection (h) provides that permit applicants may submit revised permit applications and compliance plans at any time.

Prohibition.—Subsection (i) sets out several prohibitions on persons subject to this title. No person required to submit a permit application or compliance plan may fail to submit such plan or application. In addition, no person may operate a source subject to the title except in compliance with the permit application and compliance plan or permit. Compliance with a permit issued under Title IV shall be deemed compliance with the prohibitions in this subsection, provided such compliance is deemed to have such effect under Title IV.

This subsection clarifies that nothing in the title shall be interpreted to require the shutdown of an electric steam generating unit for failure to have a permit. However, such a unit would remain subject to the full panoply of section 113 sanctions, including any shutdown sanction that may be authorized under that section.

New section 508. Repowered sources.—This new section makes available a three-year extension of the Second Phase compliance date (i.e., until December 31, 2003) for any unit being repowered with a qualifying clean coal technology. Such a repowered source would be granted allowances based upon 1.2 lbs/mmBtu times its 1985–87 baseline. If such sources do not increase emissions, they would be exempt from meeting NSPS and from PSD review.

Availability.—Subsection (a) requires that in order to qualify for the extension, the owner or operator must demonstrate, by January 1, 1998, to the permitting authority that the unit will be repowered with a qualifying clean coal technology. By December 31, 2000, the owner or operator must provide satisfactory documentation of a preliminary design and engineering effort, an executed binding contract for most of the necessary equipment, and any additional information that the Administrator may require. The technology may be retrofitted at the existing affected unit or at a new replacement unit. With respect to replacements units, the owner or operator must stipulate that the replacement unit will replace the existing affected unit and must retire such existing unit from service on or before the date the replacement unit enters commercial operation.

Extensions.—Subsection (b) provides a three-year extension from December 31, 2000 to December 31, 2003 for units satisfying the requirements of subsection (a). The extension, compliance schedule and other requirements must be part of the source's permit. Any unit granted an extension cannot also receive a waiver under section 111(j).

Subsection (b) also authorizes the Administrator to permit the owner or operator of a unit previously granted an extension under subsection (b)(1) to retrofit or repower with another technology under certain prescribed circumstances. Where a good faith effort has been demonstrated, but failure occurred, additional time may be warranted. This failure may be ascertained after installation and testing or operation of the technology for which an extension has been granted, or it may be apparent even before completion of construction. Either way, the Administrator has the discretion to act pursuant to this subsection.

Control requirements.—Subsection (c) exempts repowered units which receive extensions from having to meet New Source Performance Standards.

Allowances.—Subsection (d) provides for the granting of allowances to repowered units whether existing or replacement units. During the period from 2000 until the unit is taken off line in order to install the repowering technology, such units are granted allowances based upon their baseline multiplied by the lesser of their 1996 allowable emission rate or their actual 1996 emission rate. These allowances may not be transferred, banked or used by any other source to meet emission requirements under this title.

Once the unit has been removed from operation for purposes of installing the repowering technology, and thereafter, allowances must be issued and calculated based upon the unit's baseline multiplied by a 1.2 lbs/mmBtu emission rate. The owner or operator must notify the Administrator 60 days before the unit is removed from operation. During the year in which the unit is taken off line, the unit will receive allowances for part of the year based on paragraph 1; and for the rest of the year based on paragraph 2. Allowances for that year should be prorated in accordance with the proportion of the year that the unit is on line.

Units selected for negotiations.—Subsection (e) provides that an oil/gas plant that has been selected for DOE negotiations to convert to coal and install a project funded under DOE's Clean Coal Technology Program, is to be treated as a clean coal project for purposes of receiving allowances, but not for purposes of receiving an extension.

Prohibition.—Subsection (f) makes it illegal for any repowered source to fail to comply with the requirements of this section.

New section 509. Election for additional sources.—This new section establishes the terms under which nonutility units that emit SO₂ (E.G., INDUSTRIAL BOILERS), AS WELL AS BOTH UTILITY AND NONUTILITY UNITS THAT EMIT NO_x, MAY ELECT TO PARTICIPATE IN THE EMISSION ALLOWANCE SYSTEM.

Applicability.—Subsection (a) provides that any existing unit that is not an affected unit for SO₂ OR NO_x MAY SEEK TO OPT INTO THE ALLOWANCE SYSTEM AND BECOME AN AFFECTED UNIT UNDER THIS SECTION AT ANY TIME.

Establishment of baseline.—Subsection (b) provides that the Administrator shall issue rules for establishing the baseline for allocating allowances to units that become affected units under this section. The baseline shall be based on fuel consumption and operating data for the years 1985, 1986, and 1987, if available.

Allowances for affected units.—Subsection (c) provides that affected units under this section that seek SO₂ ALLOWANCES SHALL BE ALLOCATED ALLOWANCES EQUAL TO THE PRODUCT OF THE LESSER OF THE UNIT'S 1985 ACTUAL OR ALLOWABLE EMISSION RATE MULTIPLIED BY THE UNIT'S BASELINE. IF THE UNIT DID NOT OPERATE IN 1985, THE ADMINISTRATOR SHALL USE THE EMISSION RATE OF A REPRESENTATIVE YEAR IN APPLYING THE ALLOCATION FORMULA.

The subsection also provides that the same rules shall be applied in allocating NO_x ALLOWANCES TO THOSE UNITS THAT SEEK THEM. HOWEVER, IN THE CASE OF UNITS SUBJECT TO NO_x LIMITATIONS UNDER SECTION 506, THE EMISSION LIMITATION PRESCRIBED UNDER SECTION 506 SHALL BE USED IN LIEU OF THE 1985 EMISSION RATE IN ALLOCATING ALLOWANCES AFTER DECEMBER 31, 2000.

Process sources.—Subsection (d) directs the Administrator to promulgate regulations under which sources that are not units (as defined in section 502) may participate in the allowance system. Such regulations must be promulgated by 1995.

Allowances and permits.—Subsection (e) provides that sources receiving allowances under this section may transfer them in accordance with the provisions of the title. Such allowances are outside of, and not counted against, the 8.9 million ton pool of allowances, but are subject to the “tap” for purposes of the auction under Section 519(b). The allowances are not subject to section 503(i). It also provides that such sources shall be permitted in the same manner as provided in section 507.

Limitation.—Subsection (f) provides that, unlike allowances granted to utility units even after the unit retires, allowances issued under this section only last as long as the unit remains in operation. Allowances from reduced utilization or shutdown cannot be banked or transferred unless two conditions are met: (1) the designated unit is repowered or substituted with a unit or units subject to the requirements of this title and (2) the allowances are used only at these repowered or substituted units.

Implementation.—Subsection (g) requires the Administrator to issue implementing regulations within 18 months after enactment.

New section 510. Excess Emissions Enforcement fee.—This new section establishes that the owners and operators of sources that emit in excess of their allowances are liable for the payment of an excess emission enforcement fee of \$2,000 per excess ton. (This fee is in addition to any penalty or liability under other sections of the Act.) The fee is non-discretionary. In addition, units that emitted in excess of their allowances must offset the excess emissions by an equal tonnage amount in the year following the excess, or over a longer period if the Administrator so prescribes. Also, EPA will withhold allowances equal to the excess emissions from the allowances issued in succeeding years. All fees are deposited in miscellaneous receipts.

New section 511. Monitoring, reporting and record keeping requirements.—This new section establishes the Title V monitoring, reporting, and record keeping requirement. All affected sources subject to this title shall be required to install and operate CEMS and quality assure the data for SO₂ AND NO_x, OPACITY AND VOLUMETRIC FLOW FOR EACH UNIT SUBJECT TO THIS TITLE. THE ADMINISTRATOR SHALL, BY REGULATIONS ISSUED NOT LATER THAN

18 MONTHS AFTER THE DATE OF THE ENACTMENT OF THE CLEAN AIR ACT AMENDMENTS OF 1990, SPECIFY THE REQUIREMENTS FOR CEMS, FOR ALTERNATIVE METHODS THAT PROVIDE SUFFICIENTLY RELIABLE AND TIMELY INFORMATION, AND FOR RECORDKEEPING AND REPORTING OF INFORMATION FROM SUCH SYSTEMS. FIRST PHASE AFFECTED UNITS MUST COMPLY WITH SUCH REQUIREMENTS WITHIN THREE YEARS AFTER ENACTMENT, AND SECOND PHASE AFFECTED UNITS (AND UNITS SUBJECT TO SECTION 506) MUST COMPLY WITH THE REQUIREMENTS BY JANUARY 1, 1995. NEW UNITS MUST COMPLY WITH THE REQUIREMENTS UPON COMMENCEMENT OF COMMERCIAL OPERATION.

If CEM data is not available for any period and the unit cannot provide substitute information satisfactory to the Administrator, the Administrator must deem the unit to be operating in an uncontrolled manner.

New section 512. Compliance with other provisions.—Subsection (a) establishes that compliance with Title V does not exempt sources from their requirements under any other part of the Act.

Subsection (b) addresses issues raised in the context of the WEPCo decision, *Wisconsin Electric Power Co. v. Reilly*, Nos. 88–3624, 89–1339, 7th Circuit (Jan. 19, 1990). The subsection provides that physical changes in (or changes in the method of operation of) any source for purposes of complying with the requirements of this title shall not subject the source to NSPS under section 111 or prevention of significant deterioration review, unless the changes increase the source's potential to emit. The purpose of this provision is to remove the “catch 22” whereby a source that makes modifications to control emissions could be treated as undertaking a “major modification” and thereby subjected to standards under section 111 or part C, even though emissions from the source actually decline. Title V does not require any affected source to use any specific method of complying with emission limitations.

New section 513. Enforcement.—This new section provides that operation of a source in violation of a requirement of the title (or regulations implementing the title) is a violation of the Act. In particular, it is illegal for an affected unit to emit SO₂ IN EXCESS OF ITS ALLOWANCES. EACH EXCESS TON IS DEEMED TO BE A SEPARATE VIOLATION OF THE ACT.

New section 514. Report to Congress.—This new section requires the Administrator to report to Congress on the environmental effects of the emission reductions required under this Title.

New section 515. Clean coal technology incentives.—This new section provides regulatory incentives to encourage the use of clean coal technologies.

Revised regulations for clean coal technology demonstrations.—Subsection (a) requires the Administrator to revise requirements under section 111 and parts C and D of Title I to facilitate clean coal demonstration projects. Such revisions shall be consistent with subsections (b) and (c). For purposes of the section, a clean coal demonstration project is in general terms a project for the commercial demonstration of clean coal technology in which the Federal funding contribution is at least 20 percent.

Temporary projects.—Subsection (b) provides that temporary clean coal technology demonstration projects (in which the technology is operated for five years or less) shall not be subject to the requirements of section 111 or parts C or D of Title I, so long as the project complies with all applicable requirements in the SIP and such other requirements as are necessary to attain or maintain NAAQS.

Permanent projects.—Subsection (c) provides that permanent clean coal demonstration technologies shall not be subject to the requirements of section 111 or part C or D of Title I if the projected emissions from the project (assuming the source operates at 70 percent of capacity) do not exceed the actual predemonstration emissions and the project complies with applicable requirements in the SIP and such other requirements as are necessary to attain and maintain the NAAQS.

Preexisting requirements.—Subsection (d) provides that preexisting requirements under the Act continue to apply to clean coal demonstration projects until the project qualifies for relief from such requirements under this section.

First phase affected sources.—Subsection (e) provides that after enactment, new clean coal demonstration projects may be funded only if the project owner or operator owns or operates any sources subject to First Phase emission reduction requirements. This subsection only applies to future commitments of funding under the DOE program, funds allocated to procurements issued subsequent to May 1, 1989; the existing commitments and obligations for specific projects that have been selected under the programs are left intact. The purpose of this subsection is to provide some additional assistance to the utility systems bearing the greatest clean-up obligations.

New section 516. Severe energy supply interruptions and energy fuel supply shortages.—This new section provides limited relief from the requirements of this title in emergency situations.

EPA order.—Subsection (a) describes three very narrow circumstances in which the Administrator may issue an order to an affected unit authorizing the unit to emit in excess of its allowances. These circumstances occur if (1) the President has declared an emergency fuel supply shortage that will cause major adverse impacts; (2) the President finds that a catastrophe has occurred (as defined under the Disaster Relief and Emergency Assistance Act) that requires an assured supply of electricity to save lives; or (3) the President finds that a major disaster has occurred (as defined under the Disaster Relief and Emergency Assistance Act) that requires an assured supply of electricity to alleviate hardship. To qualify for the order, the unit must demonstrate that its ability to meet the requirements of the title have been significantly impaired and that it had established a reasonable reserve for contingencies.

Gas curtailments.—Subsection (b) authorizes units that burned more than 90 percent natural gas during 1985 through 1987, including 100 percent gas units, to burn fuel oil during the period of any gas curtailment under the Natural Gas Policy Act. Such units shall not be subject emission limitations or allowance requirements during the curtailment, except that the units may not emit SO₂ AT A RATE ABOVE THE MORE STRINGENT OF 0.5 LBS/MMBTU OR THE SIP RATE.

New section 517. Protection of low-income households.—This new section applies to each State-regulated electric utility whose annual sales exceed 500,000,000 kwh. Subsection (b) allows a State regulatory authority, at its discretion, to require its jurisdictional utilities, for purposes of this section, to identify and quantify the expenditures made by those utilities to comply with Title V. No utility which has identified such expenditures pursuant to subsection (b) may include those expenditures in the rates and charges imposed on income-eligible customers, as defined in subsection (d).

Subsections (b) and (c) make clear that this prohibition is discretionary with each State PUC and this section is not intended to require PUCs to change their rate regulation policies.

New section 518. DOE units.—This new section establishes more stringent requirements for the Joppa, Kyger Creek, and Clifty Creek power plants which provide, by contract with the Secretary of Energy, more than 75 percent of their energy to Federal facilities. Units at these plants are issued allowances, both in First Phase and Second Phase, calculated as the product of their baseline and a 0.4 lbs/mmBtu emission rate. Such units do not receive allowances under Section 504 or 505. DOE can buy allowances, subject to appropriations, to achieve this rate.

The intent of this designation is that construction and other costs associated with the installation of the required control technology to meet the requirements of this legislation at DOE facilities will be paid subject to appropriation by DOE. DOE will also be responsible for a proportional share of the increased costs for operation and maintenance due to compliance with this Section. Such share will be based on the proportion of energy generated by such facilities which is consumed by the DOE. For the purposes of these provisions, DOE facilities will be considered facilities constructed for generation of electricity in general to DOE and providing service to DOE in calendar year 1990.

New section 519. Auction.—This new section establishes two auction mechanisms to facilitate the liquidity of the market in emissions allowances: an early (March 1992) auction and an annual (June 1993 and annually thereafter) auction.

Early auction.—Subsection (a) requires EPA, in consultation with the Treasury, to hold an early auction (by the end of March 1992) at which owners or operators of affected units may offer allowances for sale. Unlike the annual auction (Section 519(b)), the early auction is optional for sellers, and sellers electing to participate may offer as many allowances for whatever years it chooses, at such minimum prices as it elects. Sellers in the 1992 auction may offer a “lump” of allowances for any single year, or a stream of allowances for a succession of years.

In order to allow as many potential sellers as possible to participate in the early auction, EPA is directed under Section 519 to provide, as early as possible, notification and documentation of allowances to be issued. If sufficient notification and documentation for owners or operators to legally transfer at the auction their rights to receive allowances has not been issued prior to the auction, Table A of the bill (as adjusted 6 percent downward) shall be treated as entitling the owners or operators in Table A to actually receive those allowances. With regard to Second Phase allowances, EPA is required to promulgate a proposed list of such allowances by December 31, 1991. Any owner or operator wishing to sell Second Phase allowances in the March 1992 auction may offer for sale up to 50 percent of the allowances allocated to it under the proposed list.

Owners or operators who wish to participate in the auction must notify the Administrator and must submit to him a sealed offer to sell. The sealed offer will specify the number of allowances and the minimum price at which the allowances are to be sold. The Administrator shall publish a notice of the number of allowances to be offered at the auction.

Anyone may submit sealed bids to the Administrator to purchase allowances in the auction. The Administrator will match the lowest offers to sell with the highest bids. Sales of allowances through the auction shall constitute an obligation upon the buyer to buy and the seller to sell the allowances. Failure to meet the obligation will be considered a violation of the Act. No money is to be transferred to the Federal government under this section.

Annual auctions.—Subsection (b) describes the mandatory, annual auction process. This provision responds to a variety of concerns, including at least the following three: (1) the concern of buyers that no allowances will be available for purchase; (2) the concern of sellers that an auction mechanism compensate them for the investments necessary to create allowances; and (3) solutions to the regulatory impediments to the fluid transfer of allowances.

This section addresses these problems by establishing a mandatory 5 percent “tap” (withholding by EPA) on all operating allowances. Of that 5 percent:

100,000 tons per year are set aside for direct sale at \$1,500/ton for any buyer unable to purchase allowances otherwise (Section 519(c)(2)). This provision is sunsetted if less than 50 percent are sold (including independent producer contingency guarantee) for any three-year period after 1997;

25,000 tons per year for the first 10 years of Second Phase are set aside for sale \$750/ton for units in States with average emission rates below 0.9 lbs/mmBtu (Section 519(c)(3)); and

62,000 tons per year of Second Phase allowances are reserved for distribution (not sale) to certain eligible units (Section 519(c)(4)).

40,000 tons per year of Second Phase allowances are reserved for distribution (not sale) to certain other eligible units (Section 505(g)).

The remainder of the 5 percent tap (223,000 tons per year in the Second Phase) will be auctioned annually by the Administrator, in consultation with Treasury. The first auction will take place in June 1993, and will auction one-third of the

“tapped” tons for the year 1996. One-third of these allowances will also be auctioned in 1994 or 1995. The 1996 annual auction will auction 100 percent 1997 allowances. All subsequent auctions will auction allowances one year in advance. Although the allowances for sale at each auction are allowances issued for a particular year, such allowances are fully bankable, and may be used in any year or year subsequent to the year for which they are issued.

The Administrator is required to sell the “tapped” allowances to bidders, starting with the highest bid and continuing until all the tons are sold or all the bidders accommodated, whichever comes first. Sellers may not set minimum prices; bidders are required to submit specified prices for the allowances they wish to purchase. Any revenues from the auction are returned pro rata to the owners or operators from whom they were “tapped.” Any allowances not sold at the auction are returned pro rata to the owners or operators from whom they were “tapped.” Once all of the “tapped” allowances have been sold, owners or operators wishing to offer additional (i.e., more than the 5 percent tap) allowances for sale at any annual auction may do so. Such allowances may be offered with a minimum price, and the revenues from any such sale are returned in full to such owner or operator. Finally, EPA is required to report prices and results of each auction.

New section 520. Regulatory reforms to reduce air emissions.—This section prohibits utilities from interpollutant trading under section 503(c) unless the utility has done a least-cost plan and its State regulatory authority has implemented regulatory reforms that ensure that the least-cost plan is profitable to the utility. However, State regulatory authorities which decide not to implement the reforms described above shall notify the Administrator of that fact and state the reasons for not doing so.

All owners of Phase I affected units whose wholesale rates are not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) or to a State regulatory authority, shall develop a least-cost plan described above.

Nothing in this section precludes a State or State regulatory authority from providing additional incentives to utilities to encourage energy conservation.

Section 502. New source performance standard

This section repeals the “percent reduction” requirement in current section 111. This requirement, as interpreted by the Administrator, mandated that all new coal-fired power plants reduce emissions by a fixed percentage (70 percent in the case of low-sulfur coal and 90 percent in the case of high-sulfur coal). It effectively required the installation of scrubbers on all new plants, regardless of the sulfur content of the fuel burned.

In the place of the percent reduction requirement, the Administrator must promulgate revised NSPS within three years. These new standards must insure that no new source will emit any pollutants at a rate greater than would have been permitted under the percent reduction requirement. The effect of new standards will be to give units the flexibility to meet the emission rates established under the new standards through whatever combination of fuels and emission controls the units choose.

Title VI: Provisions Relating to Enforcement

INTRODUCTION AND BACKGROUND

Since 1970, the principal enforcement tool of the Clean Air Act has been section 113 which provides EPA and the Attorney General with important enforcement authority, including Administrative orders, inspections, civil penalties, and criminal penalties. H.R. 3030 retains, clarifies and expands that section in a number of ways, as recommended by the President, while, at the same time, providing adequate procedural safeguards.

Enforcement is an important part of any law. Without it, the law's policy and requirements will have little impact. Thus, it is important that there are adequate and effective enforcement tools and that they are properly, effectively, timely, and fairly

utilized. The Committee, in adopting these provisions, points out the need for EPA and the Justice Department to utilize these provisions fairly and in a reasonable manner, particularly in the early stages of implementation of this legislation.

SECTION-BY-SECTION ANALYSIS

Section 601. Section 113 Federal enforcement

In general.—Paragraph (i) of subsection (a) provides that, under the amended section 113, the 30-day notice provisions for alleged SIP violations are only intended to give the States time to exercise their prerogatives before EPA starts enforcement. While this notice provision does not apply to Title IV permits (which, in the future, will be the primary means to implement SIPs), such notice is possible under the provisions of Title IV and should, where appropriate regarding SIPs, be provided under that title by rule.

State failure to enforce SIP or permit program.—Paragraph (2) of this subsection provides that whenever EPA finds violations of a SIP or permit program under Title IV that are so widespread that they appear to result from a State failure of enforcement, EPA must notify the State. In the case of a permit program, the notice provisions of Title IV will apply. If the failure goes beyond 30 days (90 days for permit programs), EPA must give public notice of the finding. During the entire failure period beginning with public notice, the bill makes clear that EPA has discretion to enforce any SIP or permit program requirement.

EPA enforcement of other requirements.—Paragraph (3) of this subsection provides that whenever on the basis of information available to the Administrator, he finds that a person has violated or is in violation of any requirement in the specified sections of the Act, relating to new source performance standards, standards for hazardous emissions, inspections, etc., Title IV permits, or any prohibition relating to Title V on acid deposition control, including any requirement of a rule, order, waiver or permit promulgated or approved under those sections or titles or any requirement for a fee owed to the U.S., the Administrator may take the listed enforcement actions.

Requirements for orders.—The principle change in this paragraph is to authorize EPA to issue administrative orders with nonrenewable compliance schedules of up to 12 months in duration. As recommended by the Administration, this provision provides EPA with the ability to expeditiously resolve violations administratively.

Failure to comply with part C or part D of title I.—This paragraph of subsections (a) authorizes enforcement actions where a State is not acting in compliance with any requirement of Part C or Part D of Title I.

The Committee wants to make it clear that as with all environmental statutes the option of preceding criminally, where appropriate, is not intended to be excluded by the bringing of a administrative or civil action pursuant to this subsection (a).

Civil and judicial enforcement.—Subsection (b) provides EPA with enforcement authority, subject to normal prosecutorial discretion, to bring civil penalty actions against an affected source, a major emitting facility, or a major stationary source (as those terms are defined in the Act) and to recover a civil penalty of not more than \$25,000 per day for each violation and to commence a civil action for a permanent or temporary injunction or both. The instances for which these actions may be taken are parallel to the provisions in subsection (a).

The subsection also makes it clear that the action may be brought in the District Court of the United States in which the violation is alleged to have occurred or where the defendant resides or has his principal place of business. The court will have jurisdiction to restrain the violation, require compliance, assess a civil penalty, collect any fees owed the U.S. and any assessment or penalty owed under section 120, and to award other appropriate relief. EPA must give notice of the action to the State Air Pollution Control Agency. The court may award cost of litigation to the party or the parties against whom such action was brought in any case that the court finds the action unreasonable.

Criminal penalties.—Subsection (c) currently only authorizes misdemeanor level criminal sanctions for violations of the Act. The bill amends the Act to authorize, subject to normal prosecutorial discretion, felony level sanctions for certain knowing violations, as well as misdemeanor level penalties for negligent violations.

Paragraph (1) provides that any person who knowingly violates a final order or requirement under sections relating to new source performance standards standards for hazardous emissions, section 114 matters relating to inspections, etc., provisions relating to preconstruction requirements, order relating to preconstruction requirements, section 303 emergency orders, permit requirements under Title IV, acid deposition requirements under Title V and any fee owed the U.S., shall upon conviction be punished by a fine pursuant of title 18 of the U.S. Code or imprisonment for not more than five years or both. Under title 18 U.S.C. the maximum fines can be up to \$250,000 for individuals and \$500,000 for organizations.

Paragraph (2) relates to violations of record keeping requirements, as well as reporting requirements, and the falsification, or tampering, or failing to install required monitoring devices or methods. It increases the penalty from six months imprisonment or a \$10,000 fine, or both, to two years imprisonment and maximum fines under title 18 U.S.C. of up to \$250,000 for individuals and \$500,000 for organizations.

The Committee's intention is that the criminal sanctions provisions would be implemented and carried out in the same manner as the Clean Water Act and that EPA should provide guidance to sources as to what kind of records they may be expected to maintain and make available to ensure compliance with the Act.

Paragraph (3) provides for criminal penalties for failure to pay fees owed the U.S. under Titles I, III, IV, and V of the Act.

Paragraph (4) adds a new provision requiring that any person who negligently releases into the ambient air the hazardous air pollutants listed under section 112, or a extremely hazardous substance listed under section 302 of the Superfund Amendments and Reauthorization Act (which is not listed under section 112), and who at the time negligently places another person in imminent danger of death or bodily injury, shall upon conviction be punished by a fine or imprisonment or both. The fine is established under title 18 U.S.C. and the imprisonment is up to one year. There is provision for doubling the penalty for second or future violations.

Paragraph (5) provides that any person who knowingly releases into the ambient air any of the above pollutants and who knows at the time that he places another person in imminent danger of death or serious bodily injury shall upon conviction be punished by fine or imprisonment. In this case, the fine is also covered under title 18 U.S.C., but imprisonment is up to 15 years. If the violation is by an organization (which is defined to be a legal entity other than the Government and includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons) that organization would be subject to a fine of up to \$1,000,000 for each violation. These penalties can be doubled for second and future violations. If in the case of an air pollutant for which EPA has set an emission standard or issued a permit under Title IV, the release, in accordance with the standard or permit, shall not constitute a violation with paragraph (4) or this paragraph. The paragraph includes provision for determining whether a defendant, who is an individual, knew that he placed a person in imminent danger or serious bodily injury. It also provides affirmative defenses. These provisions stem from other environmental statutes.

Administrative assessment of civil penalties.—Subsection (d) authorizes EPA to assess civil penalties of up to \$25,000 per day of violation under the specified circumstances. EPA's authority cannot exceed \$200,000 and the alleged violation must have occurred within 12 months prior to the administrative action, unless EPA and the Attorney General jointly determine that a matter involving a larger penalty amount and a longer period of violation is appropriate for administrative penalty action. While that determination is not subject to judicial review, the Committee would expect that both agencies would maintain a record of those determinations and the basis and the reasons for them since the Committee would most likely be interested, as time goes on, in such matters. Such penalties would be assessed administratively by EPA by order, made on the record after an opportunity for a hearing in accordance with 5 U.S.C. 554 and 556. EPA shall issue reasonable rules for discovery and other

procedures for the hearing consistent with those sections of title V of the U.S. Code. The Administrator's proposed order is subject to notice in order to provide an opportunity to request a hearing on the order within 30 days after the notice is received by the alleged violator. EPA would have to set up proper procedures for delivery of such notices and the starting of the 30-day period. EPA has authority to compromise, modify, or remit any penalty.

The subsection authorizes EPA, in consultation with the Attorney General and the States, to implement a field citation program by regulation which would establish appropriate minor violations for such citations which are not to exceed \$5,000 per day of violation. The citations are to be issued by Federal officers or employees designated by EPA.

The Committee, in adopting this provision, is concerned that this authority not be misused and expects that the rules will ensure that such EPA personnel will be well trained and will assess penalties on a reasonable and consistent and fair basis.

It is important to stress that issuance of a citation does not require the person to pay. That person may elect to pay or request a hearing within the time specified by regulation. Such hearing shall not be subject to sections 554 and 556 of Title V U.S.C., but the person affected shall have a reasonable opportunity to be heard and present evidence. At this point, it should be clear that EPA ought to provide for such hearings at various places reasonably close to the alleged violators business and not require that the alleged violator to travel to Washington, DC for such hearings.

Any civil penalty assessed by EPA under subsection (d) is subject to review in the courts. Any civil penalty that is not paid by the violator, as appropriate, is subject to collection in the courts as well and to assessment of interests.

Penalty assessment criteria.—New Subsection (e) clarifies the criteria to be applied in assessing civil penalties. EPA and the court must take into consideration, in addition to such other factors as justice may require, the size of the business, the economic impact of the penalty on the business, the violators compliance history and good faith efforts to comply, the duration of the violation, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance and the seriousness of the violation. The penalty may be assessed for each day of the violation. For purposes of determining the number of days of violation, the violation shall be deemed to be commenced on the first provable date of violation and continue thereafter until compliance, unless the violator can show by preponderance of evidence that there were intervening days with no violation or that the violation was not of a continuing nature.

Rewards.—The bill provides for payment of awards of up to \$10,000 for information that leads to conviction of violation of various titles of the Act. Any payment is subject to the appropriations process.

Settlements: Public participation.—Subsection (g) adopts a policy applicable to EPA that has been utilized other agencies requiring notice and an opportunity for written comment concerning proposed consent orders or settlement agreements under the Act which do not relate to enforcement actions under sections 113, 120, or Title II.

Section 602. Compliance certification

This amendment clarifies and confirms that EPA has authority under section 114(a) to require enhanced monitoring and to require such monitoring in compliance certifications.

Section 603. Administrative enforcement subpoenas

This section amends section 307(a) to give EPA authority to issue administrative subpoenas in support of its enforcement activities under the named sections of the Act.

Section 604. Enforcement of administrative orders

This section deletes section 303(b) of the Act which relates to emergency orders and makes section 303 orders enforceable under other enforcement provisions of the Act.

Section 605. Scope of emergency orders

This section amends the emergency order provisions of the Act to give EPA greater authority to issue emergency orders without delay.

Section 606. Contractor listings

Section 606 of the Act is amended to enable EPA to exclude from Federal Government contracts, grants or loans, any facility owned or operated by a person criminally convicted under specified sections of the Act.

Section 607. Judicial review pending reconsideration of regulations

This provision confirms that the filing of petitions for agency reconsideration does not render agency action nonfinal for purposes of judicial review and does not toll the 60-day time period for seeking judicial review.

The Committee intends this provision to confirm that, as clearly contemplated by the last sentence of subsection 307(d)(7) (B) of the existing Act, a petition for review of an agency action is authorized under section 307 regardless of whether a petition for agency reconsideration has been filed.

Section 608. Citizen suits

This section provides clarifying amendments regarding citizens suits, including the establishment of a penalty fund and provisions for intervention of EPA in such suits.

Section 609. Enhanced implementation and enforcement of new source review requirements

This section makes technical changes regarding new sources subject to enforcement, both civil and criminal.

Section 610. Movable stationary sources

This section adds a new definition to the Act on stationary sources to make it clear that emissions from movable stationary sources, such as mobile asphalt batch mixing trailers and ships at port, are not subject to the Act's stationary source requirements.

Section 611. Enforcement of new titles of the act

This section expands the section 120 remedy to cover violations of the new Title IV permit program and Title V regarding acid deposition.

The Committee, in considering Title VI, did not adopt the provisions of H.R. 3030 that would have allowed EPA to use contractors in inspections and enforcement. The Administration proposed the amendment "to clarify and confirm" the reported "discretionary authority to use contractors" that EPA claims it already has. The EPA, in testimony, claimed that it needed this

authority for budgetary reasons. EPA said that the OMB wanted EPA to use contractors in lieu of hiring new personnel. The Committee did not adopt the EPA view nor confirm this EPA view of its authority. Indeed, the Committee made it clear that only Federal employees and officials should carry out these authorities. This is not an appropriate role for contractors, many of which (including their parent or subsidiary firms) have or could have actual or potential conflicts of interest. They should not, for example, be reviewing records for EPA of other firms, particularly since their parent or a subsidiary could not or in the future do business with such firms.

Title VII: Miscellaneous Provisions

Title VII of the bill contains miscellaneous provisions. These are summarized in the section-by-section analysis.

SECTION-BY-SECTION ANALYSIS

Section 701. Grants for support of air pollution planning and control programs

Section 701 amends section 105 of the Act regarding grants to air pollution control agencies. It authorizes the Administrator to make grants to such agencies in amounts up to three-fifths of the costs of planning, developing, establishing, carrying out, or maintaining an air pollution control program. Under current law, depending on the purpose of the grant and the identity of the recipient, the Administrator is authorized to award grants that cover up to one-half to three-quarters of relevant costs. Section 701 provides that agencies contributing less than the required two-fifths minimum may continue to receive funding under the provisions of current law for three years, but thereafter they must attain the minimum two-fifths funding level.

Section 701 also requires the Administrator to revise the current regulations defining nonrecurrent and recurrent expenditures. These regulations are used by the Administrator in implementing the provision in section 105 that prohibits the award of grants to States that reduce their annual expenditures of State funds for recurrent expenditures.

Section 702. Annual report repeal

Section 702 repeals section 313 of the Clean Air Act. This section required the Administrator to submit an annual report on measures taken to implement the Act.

Section 703. Review and revision of criteria and standards

Section 703 amends section 109 by revising the procedures for periodic review and revision of NAAQS and the air quality criteria on which they are based. In general, the amendments require the Administrator to determine within five years after enactment of H.R. 3030 whether revision of existing standards is appropriate after reviewing the criteria published under section 108 and the NAAQS and making appropriate revisions in the criteria and, if so, to complete appropriate revisions within three years after the determination. Thereafter, EPA will repeat this process periodically. EPA has five years to complete the initial review. Under current law, both the review of the standards and their revisions must be completed within five years. EPA has not been able generally to meet this timetable. Also, it appears too short. A decision not to revise a standard is subject to judicial review.

The section also amends the procedures for issuing air quality criteria and promulgating standards for pollutants newly listed under section 108. The deadline for issuing the criteria is extended to three years (from one year), and the deadline for proposing a new NAAQS is extended to three years from promulgation of the air quality criteria (from a requirement for simultaneous promulgation).

Section 704. Air pollutant release investigation board

Section 704 adds a new section 192 to the Act. This section establishes within EPA an Air Pollutant Release Investigation Board. The Board consists of three members appointed by the Administrator.

The Board is authorized to investigate any potentially dangerous accidental release of an air pollutant, except certain releases that either the Nuclear Regulatory Commission or the National Transportation Safety Board are authorized to investigate. Upon completion of its investigation, the Board must submit a report of its findings and recommendations to the Administrator, the Secretary of Labor, and Congress and make the report available to the public.

Section 705. Emission factors

Section 705 adds a new section 129 to the Act. This section directs the Administrator to review and, where necessary, revise the emission factors that may be used under the Act to estimate quantities of emissions of CO, VOCs, and NO_x from sources, including area sources and mobile sources. Such review must be completed within three years. In addition, the Administrator must establish new emission factors for sources for which no such factors have been established.

Until the revision is finished, the provision will not effect the validity of emission factors established by EPA before enactment.

As long ago as April 1988, two former EPA officials expressed concern about "EPA's failure in recent years to effectively carry out basic testing activities whose products are essential elements in the formulation of effective and economical Federal, State, and local strategies to solve the nonattainment problems that plague many of the nation's major metropolitan areas." They noted that EPA publishes its motor vehicle emission factors in a series of computer models known as MOBILE1, MOBILE2, etc. The latest is MOBILE4, released on February 28, 1989 by EPA. The models have predicted emissions of HC, CO, and NO_x from on-highway motor vehicles.

The Committee asked GAO to examine EPA's development of the model and the extent of public participation. In an August 25, 1989 opinion, GAO said:

While the Clean Air Act itself does not require EPA to develop MOBILE4 as a regulation, MOBILE4 is subject to MOBILE4 through a rulemaking, under the Administrative Procedure Act, if EPA treats notice and comment requirements. If EPA treats MOBILE4 as a flexible policy, remaining open to challenges on individual regulatory decisions that are based on MOBILE4, notice and comment are not required. EPA's workshops, by providing opportunity for comments, might be considered informal rulemaking and thereby at least partially satisfy the APA's requirements for notice and comment. However, the notice and comment requirements also impose a legal duty to respond to comments. It is unclear whether EPA provided a reasoned response to the comments it received.

EPA, in its March 13, 1990 reply to the GAO's opinion, discusses MOBILE4 and the importance of emission factors as follows:

* * * EPA does not treat MOBILE4 as a regulation. We view the model as a flexible policy. MOBILE4 is a computer program which provides gaseous emission factor estimates (hydrocarbons, carbon monoxide, and oxides of nitrogen) for eight classes of on-highway motor vehicles; thus, we consider MOBILE4 a tool. MOBILE4 is a flexible policy, as described in the GAO opinion, in that EPA does remain open to challenges on individual regulatory decisions that are based on MOBILE4. This is further addressed later in this letter.

The emission factor model, as you are aware, is periodically updated to reflect increased knowledge of motor vehicles' in-use (i.e., on the road) emissions performance. Vehicle emission control and engine technologies have evolved rapidly over the last 15 years in response to both economic and environmental pressures. In order to evaluate the benefits of these improvements, and more accurately estimate the motor vehicle contribution to overall air pollutant levels, it is necessary to update the emission factor model.

EPA's Office of Mobile Sources (OMS) maintains an emission factor testing program on an ongoing basis. In this program, randomly selected vehicle owners are recruited and asked to permit EPA to test their vehicles. In this way, the emission factor data base is continuously updated and expanded.

However, for practical purposes, EPA cannot be in the position of continuously revising and changing the model. At some point in time a revision of the model must be released so that it may be used. The timing of the release of the model depends on a number of factors; those that bore directly on the release of MOBILE4 are briefly detailed below.

The previous version of the emission factor model (MOBILE3) was released by EPA in 1984. At that time, all of the passenger car emission standards currently applicable for HC, CO, and NO_{5x} HAD BEEN PROMULGATED. THE EMISSION CONTROL TECHNOLOGY USED ON MOST PASSENGER CARS (OXIDATION-PLUS-THREE-WAY CATALYSTS, EVAPORATIVE EMISSION CONTROL CANISTERS, ETC.) WAS BASICALLY THE SAME AS IS SEEN TODAY. HOWEVER, ONE IMPORTANT ENGINE TECHNOLOGY CHANGE WAS JUST GETTING UNDERWAY AT THAT TIME--THE SHIFT AWAY FROM CARBURETORS IN FAVOR OF FUEL--INJECTION AS THE FUEL DELIVERY SYSTEM.

When MOBILE3 was released, the majority of cars still utilized carburetors, and of those car with fuel-injection systems, most were throttle-body (TBI) and very few were multi-point, or ported fuel injection (PFI). Fuel injection systems allow more precise fuel delivery to the engine, aiding in further reducing exhaust emissions, while also significantly reducing evaporative (particularly "hot soak") emissions. In 1984, this technology was relatively new, thus EPA did not have the in-use emission data necessary to adequately characterize the deterioration (emission increases) that occurs with increasing age or odometer mileage of such vehicles.

Continued emission factor testing through the 1980s has provided EPA with the data required to more accurately model emissions from fuel-injected vehicles, both as a function of age or mileage and in response to other significant influences on vehicular emissions (i.e., temperature, speed).

In addition, examination of certification records through the past 5-7 years revealed two changes in the composition of the light-duty vehicle fleet that were inadequately accounted for in MOBILE3: (1) The shift from carbureted to fuel-injected vehicles moved much more rapidly than EPA, or the industry, had foreseen. Fuel-injected vehicles represented 75 percent of light-duty vehicles (LDGVs) in the 1987 model year, as contrasted with under 20 percent in the 1982 model year. (2) Ported fuel-injection (PFI) systems predominate over throttle-body fuel-injection (TBI) systems in cars produced in 1986 and later model years, contrary to the situation of the early 1980s and to future projections made at that time. The emissions behavior of these two fuel-injection systems differs, enhancing the importance of more accurately characterizing the technology distribution of the fleet in estimating emission factors.

By 1987, the combination of EPA's increased data base on the emissions behavior of late-model, new technology vehicles and the significantly changed technology distribution had made the need for an update to MOBILE3 apparent, and development of MOBILE4 was formally started.

As the December 31, 1987 final attainment date for compliance with the NAAQS for ozone and carbon monoxide approached and then passed, EPA also began work on "post-1987" attainment strategies. An important component of all State efforts to attain these standards is accurate characterization of the baseline emissions inventory, including the mobile

source component. When EPA's Office of Air Quality Planning and Standards (QAQPS) announced that States were to begin preliminary efforts at developing baseline emission inventories for all NAAQS nonattainment areas, the release of an updated emission factor model became more pressing.

Thus, early in 1989 EPA released MOBILE4, and at that time States began to use MOBILE4 (rather than MOBILE3) in preparing emissions inventories. While the model as used for this purpose will now remain fixed for a period of time, the model as used by EPA in evaluating potential regulations will continue to be updated, as described below. This leads us to view the model as a "flexible policy," since the updated model is open to challenge in the context of individual regulatory decisions based on the model.

Included with EPA's letter were tables showing how to what extent these models and factors are relied upon in regulatory actions, including SIPs. EPA adds:

While States use an officially release version of the model (currently MOBILE4) in preparing inventories and SIP projections, there are provisions for the input of a number of State- or locality- specific inputs to the model. In this way, even the released version of the model can be partially "customized" to the conditions of a specific area.

In addressing how the model "tilts" this type of rule, we can only state the following—that the relative (mobile and stationary source) contributions to an area's inventory will influence how much emission reductions are required from the different source categories in order to project attainment. The mobile/stationary source inventory breakdown is dependent on a number of factors, including the pollutant, the year of the projection, and particularly the area being modeled. EPA provides guidance to the States on the use of the model in the SIP preparation process. The MOBILE models do not decide or tilt EPA's approval or disapproval of SIPs.

EPA itself uses the MOBILE models in evaluating the impacts of potential mobile source emission control regulations.

* * * * *

When EPA uses the model for such purposes, we make revisions to the model in order to characterize the impact of the proposed regulation, and such revisions are subject to comment as part of the regulatory process.

The released version of the model does not, and can not, be used to evaluate rules in and of itself. In order to evaluate rules, we must incorporate appropriate revisions to the model. Beyond that, since the average period between revisions to the released version of the model is three to four years, we update our "in-house" version of the model much more frequently to account for new regulations and new information developed through our continuing test programs.

The only way we can address the question of how the model helps to decide or tilt a rule is to indicate again that, in any formal rulemaking activity (whether using MOBILE4 or not), there are formulaized opportunities for comment by any and all interested parties. Mobile source emission factor projections are only one part of the required input for air quality and inventory projection models, and in themselves do not make the decisions for us. Such projections and the assumptions underlying the models used to make the projections are subject to notice and comment during the course of individual rulemaking actions.

While the bill does not resolve all concerns, clearly the study will be very helpful.

Section 706. Land use authority

Section 706 adds a new section 130 to the Clean Air Act. The new section provides that nothing in the Act affects the land use authorities of city and county governments; neither does it provide or transfer any such authority.

States are required under section 110 of the Clean Air Act to submit plans that contain such measures as may be necessary to meet the requirements of the Act. Depending on the nature of the air pollution problem in a State and the control options available to the State, the measures required under section 101(b) may or may not include measures involving land use requirements. New section 130 clarifies that if land use requirements are necessary to meet the requirements of the Clean Air Act, nothing in the Act should be construed to affect State laws regarding the appropriate entities to adopt and implement such land use requirements. Its purpose is to preclude any inference that the Clean Air Act by its terms, as amended by this bill, authorizes air pollution control agencies to override individual project-specific land use decisions made by a city or county.

Title VIII: Other Provisions

SECTION-BY-SECTION ANALYSIS

Section 801. Program to monitor and improve air quality along the United States/Mexico border

Section 801 authorizes the Administrator, in cooperation with the Secretary of State, to negotiate with representatives of Mexico to establish a program to monitor and improve air quality along the U.S./Mexico border. As discussed earlier, EPA has been engaged in such an effort since July 1984.

The monitoring component of the program must identify the sources of air pollution along the border region and the level of emission reductions from such sources needed to achieve the NAAQS and other air quality goals along the border region. The program may also include measures to reduce air pollution along the border region.

Section 801 requires the Administrator to report annually on the progress of the program. In addition, the GAO must report on the results of the program not later than January 1, 1994. Such GAO report shall include recommendations on ways to improve the program.

Finally, section 801 directs the Administrator to take into account the impacts of air pollution originating in Mexico and the program established under this section when acting on SIPs for nonattainment areas in the U.S. that are located along the U.S./Mexico border. The consideration of these impacts and the program is not intended to relax in any way the requirements otherwise applicable to such nonattainment areas under the Act.

Section 802. Equivalent air quality controls among nations

Section 802 requires the President to report to Congress within 18 months of enactment on the major differences between the provisions of the Clean Air Act as amended by this bill and air quality laws in effect in nations that are major U.S. trading partners. The report must assess the effects of such differences on the international competitiveness of U.S. manufacturers. The report must also include a strategy for reducing or eliminating any competitive disadvantages to U.S. manufacturers. An interim progress report is to be submitted to Congress within nine months of enactment.

The purpose of this section is to address the lack of equivalent and adequate air quality standards and controls among major U.S. trading partners. Under the bill, U.S. manufacturers will be required to make significant capital investments and incur incremental operating costs to implement the air quality control strategies deemed necessary to protect the public health and welfare. The impact of these controls will vary by industry, but any increased costs for U.S. products as a result of this legislation will make products made in foreign countries under weaker clean air laws more competitive in the U.S., in the foreign country, and in third country markets. As a result, U.S. products could suffer.

Not only do we face an increasingly global economy, we are also engaged in international efforts to address world environmental problems on a multilateral basis where possible. Part of the report required by this section will include a

comparison of the clean air laws of major U.S. trading partners and the norms and practices of relevant international agreements and protocols. Thus, the report will become a tool for U.S. efforts to increase environmental standards in other countries.

The Committee emphasizes that this section is more than just another reporting requirement. The section also requires the President to develop and implement a strategy to address any anticompetitive effects which will result from less stringent air quality rules of major U.S. trading partners. The President must report on recommendations in areas such as harmonization of standards, trade adjustment measures, and similar means. These efforts can be carried out through bilateral and multilateral consultations and negotiations.

Section 803. Report on costs and benefits

Section 803 requires GAO to report annually on the health and environmental benefits achieved by this Act, the financial costs of the Act, and any unintended or unexpected consequences from implementation of this bill. GAO must consult with EPA, the Department of Labor, the Department of Commerce, and others to assure the completeness of the report. The Committee expects the Comptroller General's reports to be comprehensive; all significant effects that may be reasonably attributed to the implementation of the Clean Air Act Amendments of 1990 should be included. The Committee wants to ensure that the Congress and the public will be promptly and objectively informed of gains in environmental quality, public health benefits, and economic benefits such as the development of pollution control technologies.

At the same time, the Committee realizes that scientific and economic uncertainties exist. Therefore, the Committee desires the Comptroller General to be alert to and promptly notify the Congress of any adverse consequences which may develop from implementation of this legislation. Finally, the Committee does not expect the legislation to be implemented without financial costs. The Committee desires the Comptroller General to provide an objective assessment of the long-term economic costs, as well as any serious short-term dislocations that occur.

Section 804. United States/Mexico air quality

Section 804 adds a new section 325A to the Clean Air Act. New section 325A establishes a U.S./Mexico Air Quality Office within EPA. The function of the new office is to study the prospects for the use of clean-fuel vehicles in Mexico and the possibility of standardizing air pollution control regulations within the United States and Mexico.

HEARINGS AND PREVIOUS LEGISLATIVE ACTIVITY

H.R. 3030 is the culmination of over 10 years of legislative and oversight hearings and investigation by the Committee on acid rain, nonattainment, toxic air pollution, and other air pollution problems. The Subcommittee on Health and the Environment, the Subcommittee on Energy and Power, and the Subcommittee on Oversight and Investigations held over 70 days of hearings and received testimony from hundreds of witnesses during the past decade.

SUBCOMMITTEE ON HEALTH AND THE ENVIRONMENT

In the 97th Congress, the Subcommittee on Health and the Environment held 29 days of hearings on clean air issues and on two clean air bills, H.R. 5252 and H.R. 555. The 1981 hearings were held on March 2; May 1, 19, and 20; September 21, 22, and 23; October 1, 2, 6, 14, 15, 20, 22, and 28; November 5, 10, 19, and 20; and December 7, 14, and 16. The 1982 hearings were held on January 21; February 10, 17, 18, 22, and 23; and August 27.

The Subcommittee considered H.R. 5252 and H.R. 5555 in 1982 on February 25; March 2, 3, 4, 9, 10, 11, 15, 16, 17, and 23.

In the 98th Congress, the Subcommittee held 10 days of hearings on the problems of acid rain (H.R. 3400) and hazardous air pollutants (H.R. 5084). Field hearings on H.R. 3400 were held in 1983 on December 1 (New York, New York) and December 9 (Minneapolis, Minnesota), and in 1984 on February 10 (Indianapolis, Indiana), February 17 (Cleveland, Ohio), and March 5 (Chicago, Illinois). Additional hearings on H.R. 3400 and H.R. 5084 were held in 1984 on March 20, 22, 29, and 30. A hearing on the Bhopal, India, chemical explosion and related matters was held on December 14, 1984, in Institute, West Virginia.

The Subcommittee considered H.R. 5314 (a bill that combined that provisions of H.R. 3400 and H.R. 5084) in 1984 on April 25 and 26; and May 1 and 2.

In the 99th Congress, the Subcommittee held eight days of hearings on the problems of acid rain (H.R. 4567) and toxic air pollutants (H.R. 2576). The hearings were held in 1985 on March 26 (joint hearing with the Subcommittee on Commerce, Transportation, and Tourism), June 11, 19, and 28 (New Mexico), and in 1986 on April 29 and 30; May 1 and 7.

In the 100th Congress, the Subcommittee held 10 days of hearings on acid rain (H.R. 2666), nonattainment (H.R. 3054, H.R. 3196, H.R. 2521), hazardous air pollutants (H.R. 2622), depletion of the stratospheric ozone layer (H.R. 2036, H. Con. Res. 50), and pollution from municipal waste incinerators (H.R. 2515, H.R. 2787). The hearings were held in 1987 on February 13 (Los Angeles, California) and 19; March 9; June 4; July 2, 9, and 10; August 3 (New York, New York); September 23, 28, and 30.

The Subcommittee considered H.R. 2666 and H.R. 3054 in 1988 on February 18, 23, and 24; March 1 and 2; and June 15.

In the 101st Congress, the Subcommittee held eight days of hearings on clean air issues. The hearings were held in 1989 on January 1; February 28; April 6; May 23 and 24; June 22; July 26; and in 1990 on January 25.

SUBCOMMITTEE ON ENERGY AND POWER

In the 99th Congress, the Subcommittee on Energy and Conservation and Power (now Energy and Power) held hearings on June 19 and 20, 1986, on H.R. 4567, the Acid Deposition Control Act of 1986, but took no further action. The Committee discharged H.R. 4567 from the Subcommittee on August 14, 1986, but took no further action on the legislation.

During the 100th Congress the Subcommittee held four days of oversight hearings on acid rain. The hearings were held in 1988 on May 26 (scientific guidance), June 15 (role of conservation), June 20 (field hearing held in Indianapolis, Indiana, focussing on Acid Rain in the Midwest), and June 22 (clean coal technology).

In the 101st Congress, the Subcommittee held six days of legislative hearings on bills reauthorizing the Clean Air Act. The hearings were held on September 7, 12, October 4, 11, 18 and 19, 1989. The first three days of hearings concentrated on the reauthorization aspect of the Clean Air Act, while the other days focussed on Emissions Trading, Acid Rain and Alternative Fuels.

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

In the 98th Congress, the Subcommittee on Oversight and Investigations held an oversight hearing on November 7, 1983 on EPA's air pollution control problem, particularly the hazardous air pollution control program. The investigation included a report on air toxics by the GAO. On October 1, 1984, the Subcommittee held a hearing on the scientific basis of NAAQS, particularly CO. The investigation included a report by the GAO.

In the 100th Congress, the Subcommittee held a hearing on April 27, 1987 on ozone attainment under the Clean Air Act. The investigation included two GAO reports, one relating to the health effects of benzene and EPA's efforts to control refueling vapors and one on EPA's post-1987 ozone policy.

On October 2, 1987 the Subcommittee held a hearing on U.S./Canadian air quality efforts, the status of the NAPAP research, and on the safety of onboard systems to control refueling emissions.

In the 101st Congress, the Subcommittee held a hearing on May 15, 1989 on implementation of the Montreal Protocol and Substances that Deplete the Ozone Layer. GAO issued a report in connection with this investigation.

COMMITTEE CONSIDERATION

On July 24, 1989 President Bush transmitted to Congress proposed legislation to amend the Clean Air Act to provide for the attainment and maintenance of the NAAQS, the control of air toxics, the prevention of acid deposition, and other improvements in the quality of the nation's air. On July 27, 1989 the bill was introduced as H.R. 3030 by Chairman Dingell and Ranking Republican Member Norman Lent. The following Members have cosponsored the bill:

Messrs. Lent, Bliley, Brooks, Moorhead, Flippo, DeLay, Bonior, Whittaker, Annunzio, Frenzel, Dreier (CA), Brown (CO), Vander Jagt, Espy, Anthony, Grandy, Broomfield, Cooper, Gibbons, Gingrich, Fields, Ford (MI), Tauke, Hansen, Thomas Luken, Baker, Rowland (GA), Quillen, Nielson (UT), Hall (TX), Murtha, Pursell, Ray, Walgren, Manton, Fish, Anderson, Horton, Lloyd, Bosco, Leath (TX), Houghton, Goss, Boucher, Dannemeyer, Montgomery, Schaefer, Snowe, Coble, Henry, Barton (TX), Sisisky, Ireland, Johnson (CT), Callahan, Wilson, Wylie, Boehlert, Martin (NY), McCollum, McGrath, Walker, McNulty, Kaptur, McMillen (MD), Gunderson, Ballenger, Kildee, Robert Smith (NH), Bilirakis, Wolpe, Hertel, Hammerschmidt, Towns, McCrery, Huckaby, Lightfoot, Miller (WA), Pallone, Parris, Morrison (WA), Clement, Tallon, Gilman, Weber, Gallegly, McMillan (NC), Gallo, Upton, Payne (VA), Smith (NE), Bustamante, Young (AK), Hunter, Stenholm, Robert Smith (OR), Walsh, Sundquist, Hayes (IL), Davis, Smith (MS), Solomon, Parker, Darden, Smith (TX), Sawyer, Weldon, Roth, Traxler, Rhodes, Levin (MI), Saiki, Schuette, Goodling, Dyson, Slaughter (VA), Arme, Bateman, Coughlin, Robinson, Crockett, Jones (NC), Edward (OK), Douglas, Stangland, Carr, Hayes (LA), Bartlett, Chandler, Yatron, Denny Smith (OR), Saxton, Skeen, Sarpalius, Ravenel, Holloway, Harris, Craig (Deleted August 3, 1989), Chapman, Kolbe, Inhofe, Lipinski, Livingston, Lewis (FL), Lowery (CA), Rowland (CT), Tanner, Schiff, Byron, Dickonson, Kyl, Payne (NJ), Gekas, Rangel, Pashayan, Geren, Meyers (KS), Rohrabacher, Bentley, Volkmer, Dymally, Browder, Thomas (WY), Kanjorski, Tauzin, Susan Molinari, and Stearns.

The Subcommittee on Health and the Environment held 11 days of markups in 1989 on September 13, 14, 19, 20, 26, and 28; and October 2, 3, 4, 5, and 11. The Subcommittee reported the bill H.R. 3030, as amended, by a 21-0 vote, a quorum being present.

The Subcommittee on Energy and Power held a one day of markup on February 7, 1990. The Subcommittee received opening statements but took no further action on H.R. 3030.

On March 14, 15, 20, 21, 22, 27, and 29; and April 3 and 5, 1990, the Committee met in open session and ordered reported the bill H.R. 3030, with amendment, by a vote of 41-1, a quorum being present.

COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 2(l)(3)(A) of rule XI of the Rules of the House of Representatives, the Subcommittee on Oversight and Investigations held oversight hearings and made findings that are reflected in this report on H.R. 3030.

COMMITTEE ON GOVERNMENT OPERATIONS

Pursuant to clause 2(l)(3)(D) of rule XI of the Rules of the House of Representatives, no oversight findings have been submitted to the Committee by the Committee on Government Operations.

COMMITTEE COST ESTIMATE

In compliance with clause 7(a) of the rule XIII of the Rules of the House of Representative, the Committee believes that the cost to the Government incurred in carrying out H.R. 3030 would be as provided in the following table:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The table does not include certain potential receipts and future expenditures because they cannot be estimated at this time. These costs assume enactment of H.R. 3030 late in the fiscal year and that the timetables of the bill will be met. Much of these estimates are based on EPA estimates:

U.S. Congress,
Congressional Budget Office,
Washington, DC, May 16, 1990.

Hon. John D. Dingell,
Chairman, Committee on Energy and Commerce,
House of Representatives, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has prepared the attached cost estimate for H.R. 3030, the Clean Air Act Amendments of 1989.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

Robert F. Hale,
(For Robert D. Reischauer).

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: H.R. 3030.
2. Bill title: Clean Air Act Amendments of 1989.
3. Bill status: As ordered reported by the House Committee on Energy and Commerce, April 6, 1990.

4. Bill purpose: H.R. 3030 would reauthorize and amend the Clean Air Act (CAA). Generally, the bill would restructure existing pollution abatement strategies to focus on the use of permits and revise or establish new abatement targets and timetables. Title VII would authorize the appropriations of whatever sums are needed to implement the act. Other titles of the bill would establish funding authorizations for specific abatement programs.

Title I would revise existing regulatory programs for areas that have failed to attain air quality standards for ozone, carbon monoxide, and small particulate matter (PM-10). Section 103 of the bill would allow the Environmental Protection Agency (EPA) to assess fees for the control of emissions of volatile organic compounds (VOCs) from consumer and commercial products.

Title II would amend federal laws relating to emissions of air pollutants from mobile sources. Under this title, EPA would be allowed to establish fees for certain testing activities. The bill would authorize the appropriation of \$1 million in fiscal year 1991 and \$500,000 annually through 1996 for EPA to test lead substitute gasoline additives. In addition, Title II would authorize

the annual appropriation of such sums as are necessary beginning in fiscal year 1993 to operate a federal government clean-fuel fleet vehicle program.

Title III would provide for significant changes in federal and state regulatory programs for hazardous air pollutants carried out under section 112 of the CAA. The title would also authorize the appropriation of \$5 million for each of fiscal years 1991 through 1996 for EPA and the Department of Energy (DOE) to study coke oven production emission control technologies.

Title IV of the bill would establish and consolidate basic permit requirements. Under this title, state and local permitting authorities would be required to assess an annual permit fee of at least \$25 per ton of emissions on sources of pollutants covered by this measure. The bill would require EPA to collect these fees in areas in which state and local authorities fail to impose them.

Title V of H.R. 3030 would outline a comprehensive acid rain strategy designed to reduce emissions of precursor pollutants in accordance with a specified timetable. Under this section, abatement efforts would focus on emissions limits, permits, and allocation systems. Section 515 would direct EPA to revise clean air requirements to facilitate temporary and permanent clean coal technology demonstration projects. This section would also revise DOE's Clean Coal Technology Program by requiring DOE to reprogram all unobligated money remaining in the program and make this sum available in a new competitive solicitation that would be restricted to the owners and operators of 107 electricity plants specified in the bill.

Title VI would consolidate and strengthen enforcement provisions under the CAA. In addition, this title would require that specified civil penalties collected for violations of the act be deposited into a special fund and be available for appropriation to EPA for enforcement activities.

Title VII would create new programs within EPA. In addition, the title would revise the percentage of state costs under the CAA that could be supported by federal grants.

5. Estimated Cost to the Federal Government: The table below shows the estimated budget impact of this bill, excluding a number of potential expenditures and receipts that could not be estimated.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The direct spending effects shown above result from the bill's changes to the Clean Coal Technology Program. These changes would result in a slower rate of outlays resulting from appropriations previously provided for the program.

The above table does not include certain potential receipts and expenditures. No revenue effects are included because the fees and penalties established by H.R. 3030 cannot be estimated at this time or would not be received until after fiscal year 1995. The table also excludes costs that would be incurred by federal facilities to comply with pollution control regulations, because CBO has been unable to obtain sufficient information to estimate the budgetary effects of such requirements.

The costs of this bill fall within budget functions 300 and 270.

Basis of estimate: For purposes of this estimate, CBO has assumed that H.R. 3030 will be enacted late in fiscal year 1990 and that all mandated activities, including permit program, will be carried out by affected parties in accordance with the timetables specified under each title. The estimated costs include baseline levels for EPA's spending on clean air activities. In 1990, this amount is about \$170 million. Estimates of authorization levels are based on information from EPA. Outlays have been estimated on the basis of historical spending patterns and information obtained from EPA and DOE.

Revenue Effects.—Section 182 would allow EPA to regulate consumer and commercial products which emit VOCs. The bill would require EPA to promulgate regulations within four years of enactment, and would permit the regulations to include collection of fees and charges. At this time, CBO has no basis for estimating federal revenue effects on these unspecified fees.

Section 217 would direct EPA to establish fees to recover costs of its existing motor vehicle compliance program. CBO assumes that EPA would set fees at a level to increase federal revenues by \$5 million annually once the fee system is fully implemented.

Title V would direct the EPA Administrator to withhold certain amounts of the emissions allowances that would be allocated each year. Most allowances would be sold in an auction at prices determined by a bidding process. Special reservations of 100,000 tons each year would be sold for \$1,500 per ton, and 25,000 tons each year would be sold for \$750 per ton. Within 90 days of collecting receipts from the auction, the Administrator would be required to disburse most of the receipts to the sources from which allowances were withheld. EPA would retain 10 percent of the receipts from the auction at market prices for disbursement under section 517, relating to ratepayer protection. CBO has no basis for estimating possible temporary or permanent increases in federal revenues that might occur under this section.

Section 510 would introduce a fee of \$2,000 per ton of emissions of sulfur dioxide and nitrogen oxides in excess of certain emission allowances. EPA would collect such fees and deposit the collections in the Treasury. CBO cannot predict whether sources will emit in excess of their allowances, and therefore, has no basis for estimating federal revenue effects under this section.

Title VI would include a number of civil and criminal monetary penalty provisions, which could increase federal revenues. For example, this title would introduce a penalty of \$1 million for the release of certain hazardous pollutants and administrative field citations of \$5,000 per day of violation. In addition, section 608 would provide for penalties received from citizen suits to be deposited into a special fund and be available for EPA's compliance and enforcement activities. Since the number of cases and behavior in response to penalties is difficult to predict, the effect on federal revenues cannot be determined.

The bill would also contain several provisions under which EPA would collect fees if states fail to collect them or fail to develop adequate implementation plans. For purposes of this estimate, CBO assumes state regulators would provide adequate implementation plans and collect the specified fees. Consequently, CBO has not estimated any federal revenue. While delays in developing the plans could result in revenues, there is no basis for estimating such amounts.

These fees would include any fees or charges assessed by EPA under a federal implementation plan that would be imposed if a state did not adequately design its own plan. In addition, section 402 would require sources of pollutants covered by the CAA to obtain permits and pay annual permit fees. States would be required to assess permit fees of at least \$25 per ton of each regulated pollutant, or an amount that the Administrator determines reflects the reasonable costs of the permit program. If states failed to develop and administer the permit program, EPA would be allowed to collect the fees.

Finally, nine areas that most exceed national ozone standards would be required to meet attainment standards by 2005 and 2010. Section 185 would establish an excess emissions fee of \$5,000 per ton of VOCs emitted by major stationary sources in areas which fail to meet the standards. If states do not administer and enforce these fees, EPA would collect them.

Spending effects.—Title I would require states containing areas that have failed to attain air quality standards for ozone, carbon monoxide, and PM-10 to submit revised implementation plans in order to bring areas into compliance with the standards over a period of 20 years. The bill would require that these revisions address a variety of activities, including emissions inventories, transportation control measures, attainment demonstrations, and permit programs requiring major stationary sources of ozone precursors and PM-10 to obtain permits and pay emissions fees.

In carrying out the provisions of this title, EPA would be required to provide assistance, review and approve new implementation plans, and promulgate necessary guidelines and regulations. CBO estimates that EPA would incur annual costs of \$25 million to \$35 million annually during fiscal years 1991 through 1995 to assist states in preparing inventories of emissions.

States would be required to submit plan revisions over a period of years, with the majority of revisions due within two years of enactment of the bill. CBO estimates that EPA's assistance to states in developing, adopting, and reviewing plans would result in costs of about \$70 million during fiscal years 1991 through 1995. On an annual basis, these costs would rise from \$10 million in 1991 to \$17 million in both 1994 and 1995.

H.R. 3030 also would require EPA to monitor and study the interstate transport of air pollutants. CBO estimates that the research and support activities necessary for this effort would cost about \$20 million in fiscal year 1991 and rise to \$35 million by fiscal year 1995. In addition, the bill would mandate that EPA review and revise existing control technology guidelines and issue guidelines for a variety of additional sources. CBO estimates that these activities would result in costs totaling about \$20 million from 1991 through 1994.

Title II would establish vehicle emissions standards and require EPA to promulgate new rules for fuel regulations and emissions testing. Under this title, the federal government, certain areas that fail to meet ozone standards, and certain high altitude cities would be required to purchase clean-fuel vehicles starting in 1996. The bill would authorize the appropriation of whatever sums are necessary beginning in fiscal year 1993 to pay for the expected increased cost of purchasing and operating clean-fuel vehicles in the federal government program. At this time, CBO cannot predict which clean fuels will be selected for integration into federal vehicle fleets in 1996 because clean-fuel technologies are still evolving. However, CBO estimates that the General Services Administration and the Postal Service would spend \$2 million to \$3 million annually through 1995 to gain operational experience with clean-fuel vehicles before the 1996 deadline.

The bill also would authorize the appropriation of funds to EPA to develop a program to test lead substitute gasoline additives. The measure would authorize the appropriation of \$1 million in fiscal year 1991 and \$500,000 annually through fiscal year 1996 for EPA to undertake this activity.

Section 216 would introduce a fee for the testing of lead substitute gasoline additives. EPA would be required to establish procedures to test the effectiveness of the additives, and would be allowed to impose a fee of up to \$20,000 for the proposed registration of each additive. CBO expects that receipts from such fees would be negligible. The bill would also direct EPA to establish at least one testing center at a high-altitude location. CBO estimates that operation of such a center would cost about \$3 million each year.

Title III would address the abatement and control of hazardous air pollutants from both major and area sources. The title would require EPA to develop technology-based standards for the emissions of hazardous air pollutants over a 10-year period. CBO estimates that this activity would result in costs of about \$215 million during the 1991–1995 period. These costs would increase from \$24 million in 1991 to \$47 million in 1993 and reach \$58 million by 1995.

This title would also require EPA to study the sources and effects of atmospheric deposition on the Great Lakes, Chesapeake Bay, and their tributary waters within two years and promulgate standards to prevent these effects three years after completion of the study. CBO estimates that this activity would result in costs of about \$11 million each fiscal year from 1991 through 1995. The bill would also require EPA to establish the Mickey Leland National Urban Air Toxics Research Center. CBO assumes that the federal government would pay one-half of the costs for this center, and estimates that federal costs would be about \$3 million in 1991 and increase to \$5 million annually thereafter.

Finally, this title would require EPA and DOE to undertake a study of coke oven production technology during 1991 to 1996. The bill would authorize the appropriation of \$5 million each year during this period for the research program.

Title IV would establish a uniform permit program that would require sources of air pollutants covered by the CAA to obtain operating permits. Under this title, EPA would be required to promulgate regulations establishing the minimum elements of a program within one year and review the permit programs submitted by states. CBO estimates that EPA activities associated

with development and approval of permit programs would result in costs of \$5 million in fiscal year 1991, which would increase to \$13 million in 1994, when the most intensive program review would occur.

Title V would establish a two-phase strategy to reduce emissions of sulfur dioxide and nitrogen oxides. Beginning in calendar year 1996, certain electric utility plants would be required to reduce their sulfur dioxide emissions to amounts specified in the bill. Under the second phase, beginning in calendar year 2001, sulfur dioxide emissions would be further reduced and nitrogen oxides emissions would be limited.

EPA would be charged with administering the first phase of the acid rain strategy. EPA's duties would include promulgating regulations for an emissions allocation system and continuous emissions monitoring, establishing an allowance tracking system, and issuing allowances beginning November 30, 1991. CBO estimates that these activities would result in costs of \$7 million to \$8 million annually fiscal years 1991 and 1992, which would decline to about \$3 million by fiscal year 1995. The bill would also reserve certain amounts of allowances for specified purposes. EPA would be directed to auction these allowances at both market and fixed prices. CBO estimates that administering the reserves and auctions would result in costs of about \$6 million during fiscal years 1991 through 1995.

Section 515 would interrupt DOE's current Clean Coal Technology (CCT) program, and would change its planned solicitations for CCT rounds 4 and 5. DOE currently has 16 agreements to conduct CCT demonstration projects with private companies, and is negotiating CCT agreements with 22 other selected companies. Under current law, \$2.8 billion has been appropriated for cost-sharing CCT demonstration projects anywhere within the United States. H.R. 3030 would restrict all unobligated CCT funds, about \$1.8 billion, to projects undertaken by owners or operators of 107 power plants specified in the bill. The amount of unobligated CCT funds could be as high as \$2.5 billion if DOE is required to terminate existing CCT agreements. However, CBO believes that termination is unlikely. CBO estimates that this provision would reduce budget outlays in fiscal years 1991 through 1995 by about \$150 million below CBO's baseline spending estimate because negotiations for CCT round 3 projects would be suspended and the solicitation for CCT round 4 projects would be delayed.

Title VI would revise enforcement provisions under the CAA and make more violations of the act subject to enforcement actions. CBO estimates that enforcement activity would result in costs of \$7 million to \$9 million each year in fiscal years 1991 to 1995. The bill would also allow EPA to provide rewards of up to \$10,000 to persons who provide information about violations of the act. CBO has no basis for estimating the potential costs of this provision.

Title VII would create several new programs within EPA to address air pollution. The bill would establish an Air Pollutant Accidental Release Investigation Board within EPA. This three-member board would be charged with investigating and reporting on major life-threatening releases of air pollutants. CBO estimates that the ongoing costs of operating the board would be about \$300,000 each year. Based on information from the National Transportation Safety Board, the costs of each major investigation could be about \$500,000. Because the frequency of accidental releases that the board would investigate is unknown, investigation costs are not included in CBO's estimate of the total costs of the bill.

This title would also require EPA to establish a United States-Mexico Air Quality Office and a program to monitor and improve air quality in border regions of the two countries. CBO estimates that these requirements would result in costs of at least \$8 million during fiscal years 1991 through 1995. Costs would be concentrated in 1992 and 1993, when CBO assumes monitoring equipment would be purchased and installed. These costs could vary depending on the remediation strategies chosen and the amount of any assistance provided to Mexico for this purpose.

Title VII would also change the amount of federal grants available under section 105 to offset the costs imposed on state and local air pollution control agencies. This bill would allow EPA to provide section 105 grants in amounts that support up to 60 percent of the costs of both developing and maintaining the programs. (EPA grants under section 105 currently cover approximately 35 percent of state and local air program costs.) CBO estimates that the state and local program costs will total \$250 million to \$300 million in 1990. Assuming that 60 percent of both the current state and local costs and the additional costs

that would result from H.R. 3030 would be covered by section 105 grants, CBO estimates that EPA would incur costs of \$255 million in fiscal year 1991 for this purpose. The cost would rise to \$287 million by 1995.

6. Estimated costs to State and local governments: H.R. 3030 would focus regulatory efforts on improving the effectiveness and pace of pollution abatement activities. The bill would continue to vest front-line responsibility for CAA implementation in state regulators but would require significant changes in their programs. In general, the legislation would: 1) impose a uniform structure on state air programs, including minimum requirements and area-specific program elements; 2) provide for greater accountability by creating a more formal federal/state/polluter relationship, including implementation of EPA regulations through state permits and expanded EPA oversight of state activities; and 3) speed state progress by imposing tighter implementation schedules and creating a new funding source.

While this approach would have significant implications for air program levels, its net impact on state budgets over time is difficult to quantify because of uncertainty about how some provisions would be implemented and what would happen in the absence of new legislation. In particular, the cost to any individual state would depend on its response to the bill's requirements.

For nearly all provisions, states would be required to develop implementation plans (SIPs) containing minimum specified program elements. All SIPs would be subject to EPA review. If for any reason a state should fail to adopt the required program elements, it would not be permitted to implement the new programs. As a result, many of the associated costs—and revenues—would be assumed by the federal government. In some cases, failure to adopt a program could result in imposition of a federal program or economic sanctions. For purposes of this estimate, it has been assumed that the two most significant impediments to developing an approved plan can be overcome; specifically, CBO has assumed that all states would be able to obtain the necessary up-front financing and eliminate any legal obstacles to the imposition of fees imposed by the bill.

CBO estimates that states would spend a total of \$600 million to \$650 million over the 1991–1995 period to implement all of the bill's provisions. This amount would supplement existing state and local spending for clean air activities, which CBO estimates will be \$250 million to \$300 million in 1990 and increasing amounts annually thereafter. The bill would provide for federal grants under section 105 to cover up to 60 percent of state costs. (Currently, federal funds cover about 35 percent of state costs.) If the authorized level of federal support is provided, net expenditures by states to implement the bill's requirements and continue to operate existing clean air programs would be about the same over the five-year period as they would be if current programs were simply continued. In addition, these governments would face a significant, permanent increase in the size of their air programs as they begin to operate greatly expanded permit systems. However, once these systems are in place, permit fee revenues would probably be sufficient to finance many of the new activities and provide additional resources for basic air programs. The net impact on state budgets would depend on how the additional funds would be used.

For purposes of this estimate, CBO has assumed that H.R. 3030 would be enacted late in fiscal year 1990. All estimates are based on information obtained from EPA and other federal and state officials. For purposes of estimating both the timing and level of costs, CBO has assumed that affected areas would be able to obtain adequate financing for up-front activities.

Areas not meeting air quality standards.—Most of the bill's impact would be imposed on areas that fail to attain national ambient air quality standards (NAAQS). Under Title I, initially designated nonattainment areas would generally have two years to revise existing SIPs for new attainment deadlines and emissions reductions, as well as mandated permit programs and area-specific control measures.

To some degree, many of these provisions have already been included in previous CAA amendments or approved SIPs. Key elements such as data enhancement have been incorporated in recent EPA initiatives and are already reflected in varying degrees in most agency budgets. However, limited funding has resulted in slow or inadequate implementation.

In order to comply with the bill's implementation schedule and standards for such activities, states with areas that do not meet air quality standards would need additional resources totaling about \$265 million during fiscal years 1991 and 1992. After

this period, related program costs would continue to exceed baseline levels by \$100 million to \$135 million a year. Costs in 1991 and 1992 would include \$78 million to complete emissions inventories, \$27 million to enhance monitoring networks, and \$29 million to complete existing technology standards and implement new ones. An additional \$94 million would be spent during 1991 and 1992 to revise existing SIPs for new program mandates and submit them within the bill's deadlines. Review and implementation of SIPs would cost about \$38 million in 1991, rising to \$103 million in 1993 and to \$137 million by 1995.

Most areas that fail to comply with air quality standards would also incur additional costs associated with mobile source provisions such as inspection and maintenance (I&M). Based on information provided by EPA, CBO estimates that the total additional cost for basic and enhanced vehicle I&M programs would be about \$20 million to \$25 million annually, excluding the cost of repairs. However, the private sector would bear much of the additional cost.

Toxic air pollutants.—Title III of the bill would create a new framework for regulating emissions of hazardous air pollutants. The bill would authorize EPA to delegate responsibility for this program to the states. Costs associated with this title would depend greatly on the number of states that participate and the availability of funds to develop new programs. Most states have already been delegated some level of responsibility for regulating these toxic pollutants, but differing abatement needs and other area-specific factors such as state laws and financial resources have created a wide variation in the size and structure of programs. Currently, state and local agencies spend \$10 million to \$15 million annually on air toxics programs. While a few states already have comprehensive toxics programs, most would have to expand their activities to cover smaller sources and, as EPA issues emissions standards, far more substances than they now regulate. At this time, CBO cannot estimate the additional costs for air toxics activities that would result from this bill.

Permit programs.—Title IV would require that states conduct permit programs that make sources of air pollutants covered by the CAA subject to mandatory operating permits. The permits would consolidate various regulations, including emissions limits, technology standards, and self-monitoring requirements. For most states, this title would substantially increase the number of polluters subject to operating permit requirements. Also, revised stationary source definitions would require some agencies to regulate much smaller sources. The effect of these provisions on individual jurisdictions would depend on the scope of their existing programs and on specific area conditions. While a handful of agencies may already operate such comprehensive systems, most would incur additional planning and development costs to expand their program.

CBO estimates that states would spend an estimated \$13 million through fiscal year 1995 to develop and implement new or modified permit programs as required under Title IV. After programs are adopted, all direct and indirect costs associated with issuing, administering, and enforcing permits would be recovered through mandatory permit fees of at least \$25 per ton of emissions. States would begin to collect these fees in 1994. Reasonable estimates of fee collections are impossible to make at this time. However, it appears likely that states would gradually collect fees for an increasing number of pollutants as authority is delegated to them and as EPA establishes new standards for additional pollutants. Emissions abatement over time would eventually reduce collections for some pollutants.

Bus emissions.—H.R. 3030 includes provisions that would affect the cost of urban bus purchases. First, the bill would require that an increasing percentage of bus purchases in large urban areas be operated on clean alternative fuel, beginning with 10 percent in model year 1992 and increasing to 100 percent after model year 1994. The EPA Administrator would have authority to delay this schedule by up to two years. Under current EPA regulations, all urban buses purchased in model years 1991 and later must meet a standard for emissions of particulate matter of 0.1 grams per brake horsepower-hour. This bill would require only the phased-in clean-fuel buses to meet this standard. Remaining purchases could be of conventional buses meeting a more lenient standard of 0.25 grams. Further, the bill includes a definition of clean alternative fuel that includes diesel fuel used in vehicles that meet applicable emissions standards for particulates and other substances, as well as alternative fuels such as methanol and natural gas.

In model years 1991 through 1993, this bill would ease the burden of compliance with standards for emissions of particulate matter by urban buses, relative to current regulations. Because buses that meet the existing EPA standard for 1991 are not widely

available, operators are expected to either postpone bus purchases or purchase alternative fuel buses that cost significantly more than conventional buses. While under H.R. 3030 operators would still have to purchase some clean-fuel buses according to the phase-in schedule, they would be able to purchase a number of conventional buses meeting the higher particulate standard until 1994.

Beginning in 1994, the effect of the bill on the cost of bus service is less clear. Not only would all new buses have to meet the 0.1 gram particulate standard, as they would under existing regulations, but most (all after January 1, 1995) would have to be clean-fuel buses, as defined by the bill. The technology needed to produce these buses on a wide scale is still developing. Consequently, it is not yet clear which type of technology will prove to be most cost effective in meeting these requirements or what the additional cost of these buses will be. CBO expects that the cost probably would not be great, however, compared to buses that would meet just the existing standard for particulates. Further, CBO cannot predict whether the EPA Administrator would choose to delay implementation of these requirements.

Oxygenated fuels programs.—H.R. 3030 would require specified areas that do not meet air quality standards to implement oxygenated fuels programs beginning October 1993. Under Title I, five areas that do not meet the carbon monoxide standard would be required to implement programs in which an unspecified percentage of oxygen must be blended into all gasoline fuel sold in the areas during part of the year. Title II would require 17 areas to implement oxygenated fuels programs in which the oxygen content would be specified. Based on the experience of the Denver area, which has operated an oxygenated fuels program for three years, CBO estimates that state and local governments would incur minor additional costs to operate the programs. Costs would result from a small number of additional staff and higher fuel prices. Denver officials report that about five employees work on the program, most on a part-time basis and in addition to other duties. In Denver, prices for oxygenated fuels have been greater than regular gasoline prices by less than two cents per gallon. However, the price differential could vary in other locations, depending on the type of fuels used and the fuel distribution system that services the area.

Clean-fuels programs.—Titles I and II also contain provisions that would require areas that do not meet the ozone standard to implement clean-fuels programs. Under Title II, governments in nine areas would be required to implement programs in which an increasing percentage of new vehicles, including those owned by state and local government agencies, operate on clean fuels beginning with the 1995 model year. The EPA Administrator would be authorized to extend this requirement to 18 other ozone nonattainment areas. Title I would require states to revise their SIPs to implement this program within 3.5 years.

The costs to state and local governments that would result from these requirements are uncertain and would depend on the state of developing technology and on how the requirements are interpreted. The costs that would be imposed on these governments by requiring that a certain percentage of these vehicles be operated on clean fuels would be minor before 1996. Beginning at that time, any additional costs would depend on the current clean-fuel technology. Title I would also charge states with administrative duties, including ensuring that the use of clean fuels is economic to vehicle owners and requiring that fuel providers make clean fuels available. The impact of these requirements cannot be determined at this time.

7. Estimate comparison: None.

8. Previous CBO estimate: On January 22, 1990, CBO prepared a cost estimate for S. 1630, which would also reauthorize and amend the CAA. The estimated costs of that bill vary from the costs estimated for H.R. 3030 primarily because the bills' requirements differ somewhat, and the Senate bill specified the amounts that would be authorized for appropriation for most of the required activities.

9. Estimate prepared by: Laura Carter, Kim Cawley, Marjorie Miller, Deborah Reis and Eric Nicholson.

10. Estimate approved by: C.G. Nuckols, for James L. Blum, Assistant Director for Budget Analysis.

INFLATIONARY IMPACT STATEMENT

Pursuant to clause 2(l)(4) of rule XI of the Rules of the House of Representatives, the Committee makes the following statement with regard to the inflationary impact of the reported bill: by improving the air quality of the Nation which, as indicated in this report will have considerable costs, and reducing the economic damages due to pollution the Committee believes the bill should not be inflationary.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

THE CLEAN AIR ACT

TITLE I—AIR POLLUTION PREVENTION AND CONTROL

Part A—Air Quality and Emission Limitations

findings and purposes

Sec. 101. (a) The Congress finds—

(1)***

* * * * *

[(3) that the prevention and control of air pollution at its source is the primary responsibility of States and local governments; and]

(3) that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments; and

* * * * *

(b) The purposes of this title are—

(1)***

(4) to encourage and assist the development and operation of regional air pollution prevention and control programs.

* * * * *

(c) Pollution Prevention.—A primary goal of this Act is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this Act, for pollution prevention.

* * * * *

grants for support of air pollution planning and control programs

Sec. 105. (a)(1)(A) The Administrator may make grants to air pollution control agencies in an amount up to two-thirds of the cost of planning, developing, establishing, or improving, and up to one-half of the cost of maintaining, programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards.

[(B) Subject to subparagraph (C), the Administrator may make grants to air pollution control agencies within the meaning of paragraph (1), (2), or (4) of section 302(b) in an amount up to three-fourths of the cost of planning, developing, establishing, or improving, and up to three-fifths of the cost of maintaining, any program for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards in an area that includes two or more municipalities, whether in the same or different States.]

(A) The Administrator may make grants to air pollution control agencies, within the meaning of paragraph (1), (2), (3), (4), or (5) of section 302, in an amount up to three-fifths of the cost of implementing programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards. For the purpose of this section, "implementing" means any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs.

(B) Subject to subsections (b) and (c) of this section, an air pollution control agency which receives a grant under subparagraph (A) and which contributes less than the required two-fifths minimum shall have 3 years following the date of the enactment of the Clean Air Act Amendments of 1990 in which to contribute such amount. If such an agency fails to meet and maintain this required level, the Administrator shall reduce the amount of the Federal contribution accordingly.

(C) With respect to any air quality control region or portion thereof for which there is an applicable implementation plan under section 110, grants under subparagraph [(B)] (A) may be made only to air pollution control agencies which have substantial responsibilities for carrying out such applicable implementation plan.

* * * * *

(b)(1) From the sums available for the purposes of subsection (a) of this section for any fiscal year, the Administrator shall from time to time make grants to air pollution control agencies upon such terms and conditions as the Administrator may find necessary to carry out the purpose of this section. In establishing regulations for the granting of such funds the Administrator shall, so far as practicable, give due consideration to [(1)] (A) the population, [(2)] (B) the extent of the actual or potential air pollution problem, and [(3)] (C) the financial need of the respective agencies. [No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for other than nonrecurrent expenditures for air pollution control programs will be less than its expenditures were for such programs during the preceding fiscal year, unless the Administrator, after notice and opportunity for public hearing, determines that a reduction in expenditures is attributable to a nonselective reduction in expenditures in the programs of all executive branch agencies of the applicable unit of Government; and no agency shall receive any grant under this section with respect to the maintenance of a program for the prevention and control of air pollution unless the Administrator is satisfied that such grant will be so used to supplement and, to the extent practicable, increase the level of State, local, or other non-Federal funds that would in the absence of such grant be made available for the maintenance of such program, and will in no event supplant such State, local, or other non-Federal funds. No grant shall be made under this section until the Administrator has consulted with the appropriate official as designated by the Governor or Governors of the State or States affected.]

[(c)] (2) Not more than 10 per centum of the total of funds appropriated or allocated for the purposes of subsection (a) of this section shall be granted for air pollution control programs in any one State. In the case of a grant for a program in an area crossing State boundaries, the Administrator shall determine the portion of such grant that is chargeable to the percentage limitation under this subsection for each State into which such area extends. [In fiscal year 1978 and subsequent fiscal years, subject to the provisions of subsection (b) of this section, no State shall receive less than one-half of 1 per centum of the annual appropriation for grants under this section for grants to agencies within such State.] Subject to the provisions of paragraph (1)

of this subsection, no State shall have made available to it for application less than one-half of 1 per centum of the annual appropriation for grants under this section for grants to agencies within such State.

(c) Maintenance of Effort.—(1) No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for recurrent expenditures for air pollution control programs will be less than its expenditures were for such programs during the preceding fiscal year. In order for the Administrator to award grants under this section in a timely manner each fiscal year, the Administrator shall compare an agency's prospective expenditure level to that of its second preceding fiscal year. The Administrator shall revise the current regulations which define applicable nonrecurrent and recurrent expenditures, and in so doing, give due consideration to exempting an agency from the limitations of this paragraph and subsection (a) due to periodic increases experienced by that agency from time to time in its annual expenditures for purposes acceptable to the Administrator for that fiscal year.

(2) The Administrator may still award a grant to an agency not meeting the requirements of paragraph (1) of this subsection if the Administrator, after notice and opportunity for public hearing, determines that a reduction in expenditures is attributable to a non-selective reduction in the expenditures in the programs of all Executive branch agencies of the applicable unit of Government. No agency shall receive any grant under this section with respect to the maintenance of a program for the prevention and control of air pollution unless the Administrator is satisfied that such a grant will be so used to supplement and, to the extent practicable, increase the level of State, local, or other non-Federal funds. No grants shall be made under this section until the Administrator has consulted with the appropriate official as designated by the Governor or Governors of the State or States affected.

* * * * *

interstate air quality agencies or commissions

Sec. 106. For the purpose of developing implementation plans for any interstate air quality control region designated pursuant to section 107 or of implementing section 176A (relating to control of interstate air pollution) or section 184 (relating to control of interstate ozone pollution), the Administrator is authorized to pay, for two years, up to 100 per centum of the air quality planning program costs of any commission established under section 176A (relating to control of interstate air pollution) or section 184 (relating to control of interstate ozone pollution) or any agency designated by the Governors of the affected States, which agency shall be capable of recommending to the Governors plans for implementation of national primary and secondary ambient air quality standards and shall include representation from the States and appropriate political subdivisions within the air quality control region. After the initial two-year period the Administrator is authorized to make grants to such agency or such commission in an amount up to [three-fourths of the air quality planning program costs of such agency] three-fifths of the air quality implementation program costs of such agency or commission.

air quality control regions

Sec. 107. (a)***

* * * * *

[(d)(1) For the purpose of transportation control planning, part D (relating to nonattainment), part C (relating to prevention of significant deterioration of air quality), and for other purposes, each State, within one hundred and twenty days after the date of enactment of the Clean Air Act Amendments of 1977, shall submit to the Administrator a list, together with a summary of the available information, identifying those air quality control regions, or portions thereof, established pursuant to this section in such State which on the date of enactment of the Clean Air Act Amendments of 1977—

[(A) do not meet a national primary ambient air quality standard for any air pollutant other than sulfur dioxide or particulate matter;

[(B) do not meet, or in the judgment of the State may not in the time period required by an applicable implementation plan attain or maintain, any national primary ambient air quality standard for sulfur dioxide or particulate matter;

[(C) do not meet a national secondary ambient air quality standard;

[(D) cannot be classified under subparagraph (B) or (C) of this paragraph on the basis of available information, for ambient air quality levels for sulfur oxides or particulate matter; or

[(E) have ambient air quality levels better than any national primary or secondary air quality standard other than for sulfur dioxide or particulate matter, or for which there is not sufficient data to be classified under subparagraph (A) or (C) of this paragraph.

[(2) Not later than sixty days after submittal of the list under paragraph (1) of this subsection the Administrator shall promulgate each such list with such modifications as he deems necessary. Whenever the Administrator proposes to modify a list submitted by a State, he shall notify the State and request all available data relating to such region or portion, and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate.

[(4) Any region or portion thereof which is not classified under subparagraph (B) or (C) of paragraph (1) of this subsection for sulfur dioxide or particulate matter within one hundred and eighty days after enactment of the Clean Air Act Amendments of 1977 shall be deemed to be a region classified under subparagraph (D) of paragraph (1) of this subsection.

[(5) A State may from time to time review, and as appropriate revise and resubmit, the list required under this subsection. The Administrator shall consider and promulgate such revised list in accordance with this subsection.]

(d) Designations.—

(1) Designations generally.—

(A) Submission by governors of initial designations following promulgation of new or revised standards.—By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as—

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

(B) Promulgation by epa of designations.—(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3)(B) (relating to redesignation).

(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

(C) Designations by operation of law.—(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1) (A), (B), or (C) of this subsection (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated, by operation of law, as a nonattainment area for such pollutant within the meaning of subparagraph (A)(i).

(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

(iii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(D) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

(2) Publication of designations and redesignations.—(A) The Administrator shall publish a notice in the Federal Register promulgating any designation under paragraph (1) or (5), or announcing any designation under paragraph (4), or promulgating any redesignation under paragraph (3).

(B) Promulgation or announcement of a designation under paragraph (1), (4) or (5) shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.

(3) Redesignation.—(A) Subject to the requirements of subparagraph (E), and on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate, the Administrator may at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised. In issuing such notification, which shall be public, to the Governor, the Administrator shall provide such information as the Administrator may have available explaining the basis for the notice.

(B) No later than 120 days after receiving a notification under subparagraph (A), the Governor shall submit to the Administrator such redesignation, if any, of the appropriate area (or areas) or portion thereof within the State or interstate area, as the Governor considers appropriate.

(C) No later than 120 days after the date described in subparagraph (B), the Administrator shall promulgate the redesignation, if any, of the area or portion thereof, submitted by the Governor in accordance with subparagraph (B), making such modifications as the Administrator may deem necessary, in the same manner and under the same procedure as is applicable under clause (ii) of paragraph (1)(B), except that the phrase “60 days” shall be substituted for the phrase “120 days” in that clause. If the Governor does not submit, in accordance with subparagraph (B), a redesignation for an area (or portion thereof) identified by the Administrator under subparagraph (A), the Administrator shall promulgate such redesignation, if any, that the Administrator deems appropriate.

(D) The Governor of any State may, on the Governor's own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

(E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless—

(i) the Administrator determines that the area has attained the national ambient air quality standard;

(ii) the Administrator has fully approved the applicable implementation plan for the area under section 110(k);

(iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and

(v) the State containing such area has met all requirements applicable to the area under this Act.

(F) The Administrator shall not promulgate any redesignation of any area (or portion thereof) from nonattainment to unclassifiable.

(4) Nonattainment designations for ozone, carbon monoxide and particulate matter (pm-10).—

(A) Ozone and carbon monoxide.—(i) Within 120 days after the date of the enactment of the Clean Air Act Amendments of 1990, each Governor of each State shall submit to the Administrator a list that designates, affirms or reaffirms the designation of, or redesignates (as the case may be), all areas (or portions thereof) of the Governor's State as attainment, nonattainment, or unclassifiable with respect to the national ambient air quality standards for ozone and carbon monoxide.

(ii) No later than 120 days after the date the Governor is required to submit the list of areas (or portions thereof) required under clause (i) of this subparagraph, the Administrator shall promulgate such designations, making such modifications as the Administrator may deem necessary, in the same manner, and under the same procedure, as is applicable under clause (ii) of paragraph (1)(B), except that the phrase “60 days” shall be substituted for the phrase “120 days” in that clause. If the Governor does not submit, in accordance with clause (i) of this subparagraph, a designation for an area (or portion thereof), the Administrator shall promulgate the designation that the Administrator deems appropriate.

(iii) No nonattainment area may be redesignated as an attainment area under this subparagraph.

(iv) Notwithstanding paragraph (1)(C)(ii) of this subsection, if an ozone or carbon monoxide nonattainment area located within a metropolitan statistical area or consolidated metropolitan statistical area (as established by the Bureau of the Census) is classified under part D of this title as a Serious, Severe, or Extreme Area, the boundaries of such area are hereby revised (on

the date 45 days after such classification) by operation of law to include the entire metropolitan statistical area or consolidated metropolitan statistical area, as the case may be, unless within such 45-day period the Governor (in consultation with State and local air pollution control agencies) notifies the Administrator that additional time is necessary to evaluate the application of clause (v). Whenever a Governor has submitted such a notice to the Administrator, such boundary revision shall occur on the later of the date 8 months after such classification or 14 months after the date of the enactment of the Clean Air Act Amendments of 1990 unless the Governor makes the finding referred to in clause (v), and the Administrator concurs in such finding, within such period. Except as otherwise provided in this paragraph, a boundary revision under this clause or clause (v) shall apply for purposes of any State implementation plan revision required to be submitted after the date of the enactment of the Clean Air Act Amendments of 1990.

(v) Whenever the Governor of a State has submitted a notice under clause (iv) the Governor, in consultation with State and local air pollution control agencies, shall undertake a study to evaluate whether the entire metropolitan statistical area or consolidated metropolitan statistical area should be included within the nonattainment area. Whenever a Governor finds and demonstrates to the satisfaction of the Administrator, and the Administrator concurs in such finding, that with respect to a portion of a metropolitan statistical area or consolidated metropolitan statistical area, sources in the portion do not contribute significantly to violation of the national ambient air quality standard, the Administrator shall approve the Governor's request to exclude such portion from the nonattainment area. In making such finding, the Governor and the Administrator shall consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport.

(B) PM-10 designations.—By operation of law, until redesignation by the Administrator pursuant to paragraph (3)—

(i) each area identified in 52 Federal Register 29383 (Aug. 7, 1987) as a Group I area (except to the extent that such identification was modified by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990) is designated nonattainment for PM-10;

(ii) any area containing a site for which air quality monitoring data show a violation of the national ambient air quality standard for PM-10 before January 1, 1989 (as determined under part 50, appendix K of title 40 of the Code of Federal Regulations) is hereby designated nonattainment for PM-10; and

(iii) each area not described in clause (i) or (ii) is hereby designated unclassifiable for PM-10.

Any designation for particulate matter (measured in terms of total suspended particulates) that the Administrator promulgated pursuant to this subsection (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) shall remain in effect for purposes of implementing the maximum allowable increases in concentrations of particulate matter (measured in terms of total suspended particulates) pursuant to section 163(d), until the Administrator determines that such designation is no longer necessary for that purpose.

(5) Designations for lead.—The Administrator may, in the Administrator's discretion at any time the Administrator deems appropriate, require a State to designate areas (or portions thereof) with respect to the national ambient air quality standard for lead in effect as of the date of the enactment of the Clean Air Act Amendments of 1990, in accordance with the procedures under subparagraphs (A) and (B) of paragraph (1), except that in applying subparagraph (B)(i) of paragraph (1) the phrase “2 years from the date of promulgation of the new or revised national ambient air quality standard” shall be replaced by the phrase “1 year from the date the Administrator notifies the State of the requirement to designate areas with respect to the standard for lead”.

* * * * *

air quality criteria and control techniques

Sec. 108. (a)(1)***

(2) The Administrator shall issue air quality criteria for an air pollutant within [12 months] 3 years after he has included such pollutant in a list under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on—

(A) ***

* * * * *

(c) The Administrator shall from time to time review, and, as appropriate, modify, and reissue any [criteria or] information on control techniques issued pursuant to this section. Not later than six months after the date of the enactment of the Clean Air Act Amendments of 1977, the Administrator shall revise and reissue criteria relating to concentrations of NO₂ over such period (not more than three hours) as he deems appropriate. Such criteria shall include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

* * * * *

(e) [The Administrator shall, after consultation with the Secretary of Transportation and the Secretary of Housing and Urban Development and State and local officials and within 180 days after the enactment of this subsection, and from time to time thereafter, publish guidelines on the basic program elements for the planning process assisted under section 175 of part D.] Within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990 and periodically thereafter as necessary to maintain a continuous process of transportation and air quality planning, including emissions inventory development, the Administrator shall, after consultation with the Secretary of Transportation and State and local officials, update the June 1978 Transportation-Air Quality Planning Guidelines. Such guidelines shall include information on—

(1)***

* * * * *

[(f)(1) The Administrator shall publish and make available to appropriate Federal agencies, States, and air pollution control agencies, including agencies assisted under section 175 within 6 months after enactment of this subsection for clauses (i), (ii), (iii), and (iv) of subparagraph (A) and within one year after the enactment of this subsection for the balance of this subsection (and from time to time thereafter),

[(A) information, prepared, as appropriate, in cooperation with the Secretary of Transportation, regarding processes, procedures, and methods to reduce or control each such pollutant, including but not limited to—

[(i) motor vehicle emission inspection and maintenance programs;

[(ii) programs to control vapor emissions from fuel transfer and storage operations and operations using solvents;

[(iii) programs for improved public transit;

[(iv) programs to establish exclusive bus and carpool lanes and areawide carpool programs;

[(v) programs to limit portions of road surfaces or certain sections of the metropolitan areas to the use of common carriers, both as to time and place;

[(vi) programs for long-range transit improvements involving new transportation policies and transportation facilities or major changes in existing facilities;

[(vii) programs to control on-street parking;

[(viii) programs to construct new parking facilities and operate existing parking facilities for the purpose of park and ride lots and fringe parking;

[(ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of nonmotorized vehicles or pedestrian use, both as to time and place;

[(x) provisions for employer participation in programs to encourage carpooling, vanpooling, mass transit, bicycling, and walking;

[(xi) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;

[(xii) programs of staggered hours of work;

[(xiii) programs to institute road user charges, tolls, or differential rates to discourage single occupancy automobile trips;

[(xiv) programs to control extended idling of vehicles;

[(xv) programs to reduce emissions by improvements in traffic flow;

[(xvi) programs for the conversion of fleet vehicles to cleaner engines or fuels, or to otherwise control fleet vehicle operations;

[(xvii) programs for retrofit of emission devices or controls on vehicles and engines, other than light duty vehicles, not subject to regulations under section 202 of title II of this Act; and

[(xviii) programs to reduce motor vehicle emissions which are caused by extreme cold start conditions;]

(f) Information To Be Available.—(1) Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish and make available to appropriate Federal, State, and local environmental and transportation agencies, and from time to time thereafter the Administrator shall revise—

(A) information, prepared as appropriate after consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, regarding the emission reduction potential of transportation control measures, including—

(i) trip-reduction ordinances;

(ii) employer-based transportation management plans;

(iii) transit improvements;

(iv) traffic-flow improvements;

(v) areawide rideshare programs;

(vi) park-and-ride and fringe parking programs;

(vii) work-schedule changes;

(viii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;

(ix) programs to control extended idling of vehicles;

(x) vanpool purchase incentives;

(xi) incentives for employer-based transportation management plans;

(xii) programs to limit portions of road surfaces to the use of nonmotorized vehicles or pedestrian use, both as to time and place;

(xiii) programs for secure bicycle storage facilities and other facilities, including bicycle lanes;

(xiv) programs for new construction and major reconstruction of paths or tracks solely for use by pedestrian or other nonmotorized means of transportation; and

(xv) telecommuting.

In considering such measures for inclusion in any State implementation plan or revision thereto as may be required under this Act, the State shall choose from among and implement such measures as necessary, and should ensure adequate access to downtown, other commercial, and residential areas and avoid measures that increase or relocate emissions and congestion rather than reduce them.

(g) Assessment of Risks to Ecosystems.—The Administrator may assess the risks to ecosystems from exposure to criteria air pollutants (as identified by the Administrator in the Administrator's sole discretion).

(h) RACT/BACT/LAER Clearinghouse.—The Administrator shall make information regarding emission control technology available to the States and to the general public through a central database. Such information shall include all control technology information received pursuant to State plan provisions requiring permits for sources, including operating permits for existing sources.

national ambient air quality standards

Sec. 109. (a)(1)***

(2) With respect to any air pollutant for which air quality criteria are issued after the date of enactment of the Clean Air Amendments of 1970, [the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.] the Administrator shall promulgate proposed national primary and secondary ambient air quality standards as appropriate for such air pollutant not later than 3 years after such issuance. The procedure provided for in subsection (d) shall apply to the revision of such standards.

(b)(1) National primary ambient air quality standards, prescribed, under subsection (a) shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. [Such primary standards may be revised in the same manner as promulgated.]

(2) Any national secondary ambient air quality standard prescribed, under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. [Such secondary standards may be revised in the same manner as promulgated.]

* * * * *

(d)[(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 108 and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 108 and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.]

(1)(A) Not later than 5 years after enactment of the Clean Air Act Amendments of 1990 and thereafter as provided in subparagraph (C), the Administrator shall (i) complete a review of the criteria published under section 108 and the standards promulgated under this section (ii) make such revisions in the criteria as may be appropriate to reflect advances in scientific knowledge, and (iii) determine whether it is appropriate to propose revisions of the standards based on the applicable criteria. In making revisions or determinations under this subparagraph, the Administrator may use such procedures as the Administrator deems appropriate. Notice of revisions and determinations made under this subparagraph shall be published in the Federal Register not later than 30 days after the revisions or determinations, respectively, are made, and copies shall be made available to the general public.

(B) If the Administrator determines under subparagraph (A) that it is appropriate to propose revision of a standard, the Administrator shall commence rulemaking proceedings under section 307(d) and make such revisions as are appropriate as expeditiously as practicable but not later than 3 years after such determination is made. The Administrator may elect to follow the same procedure with respect to a determination that it is inappropriate to propose a revision of a standard.

(C) After the first review and (as appropriate) revision of a standard under this paragraph, the Administrator shall repeat the process specified in subparagraphs (A) and (B) from time to time for such standard. The review specified in subparagraph (A) shall be completed not later than 5 years after completion of the last review of the standard or, if the standard was revised as a result of such review (or judicial review), not later than 5 years after completion of such revision. For any new standard promulgated after the date of the enactment of the Clean Air Act Amendments of 1990, the first review under subparagraph (A) shall be completed not later than 5 years after the date of promulgation.

(D) A determination under subparagraph (A) that it is inappropriate to propose a revision of a standard shall be reviewable as a final action under section 307(b). If the Administrator elects to commence rulemaking proceedings under subparagraph (B) with respect to such a determination, the determination shall be reviewable only upon completion of the rulemaking. A determination under subparagraph (A) that it is appropriate to propose revision of a standard shall not be subject to judicial review under section 307(b) or otherwise.

(E) The Administrator may review and revise criteria or standards earlier or more frequently than required under this paragraph.

(2)(A)***

(B) Not later than [January 1, 1980, and at five-year intervals thereafter,] 5 years after the date of the enactment of the Clean Air Act Amendments of 1990 and thereafter at intervals corresponding to the Administrator's review of criteria and standards under paragraph (1). The committee referred to in subparagraph (A) shall complete a review of the criteria published under section 108 and the national primary and secondary ambient air quality standards promulgated under this section and shall

recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be appropriate under section 108 and subsection (b) of this section.

* * * * *

implementation plans

Sec. 110. (a)(1) Each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator, within [nine months] 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof) under section 109 for any air pollutant, a plan which provides for implementation, maintenance, and enforcement of such primary standard in each air quality control region (or portion thereof) within such State. In addition, such State shall adopt and submit to the Administrator (either as a part of a plan submitted under the preceding sentence or separately) within [nine months] 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national ambient air quality secondary standard (or revision thereof), a plan which provides for implementation, maintenance, and enforcement of such secondary standard in each air quality control region (or portion thereof) within such State. Unless a separate public hearing is provided, each State shall consider its plan implementing such secondary standard at the hearing required by the first sentence of this paragraph.

[(2) The Administrator shall, within four months after the date required for submission of a plan under paragraph (1), approve or disapprove such plan for each portion thereof. The Administrator shall approve such plan, or any portion thereof, if he determines that it was adopted after reasonable notice and hearing and that—

[(A) except as may be provided in subparagraph (I)(i) in the case of a plan implementing a national primary ambient air quality standard, it provides for the attainment of such primary standard as expeditiously as practicable but (subject to subsection (e)) in no case later than three years from the date of approval of such plan (or any revision thereof to take account of a revised primary standard); and (ii) in the case of a plan implementing a national secondary ambient air quality standard, it specifies a reasonable time at which such secondary standard will be attained;

[(B) it includes emission limitations, schedules, and timetables for compliance with such limitations, and such other measures as may be necessary to insure attainment and maintenance of such primary or secondary standard, including, but not limited to transportation controls, air quality maintenance plans, and preconstruction review of direct sources of air pollution as provided in subparagraph (D);

[(C) it includes provision for establishment and operation of appropriate devices, methods, systems, and procedures necessary to (i) monitor, compile, and analyze data on ambient air quality and, (ii) upon request, make such data available to the Administrator;

[(D) it includes a program to provide for the enforcement of emission limitations and regulation of the modification, construction, and operation of any stationary source, including a permit program as required in parts C and D and a permit or equivalent program for any major emitting facility, within such region as necessary to assure (i) that national ambient air quality standards are achieved and maintained, and (ii) a procedure, meeting the requirements of paragraph (4), for review (prior to construction or modification) of the location of new sources to which a standard of performance will apply;

[(E) it contains adequate provisions (i) prohibiting any stationary source within the State from emitting any air pollutant in amounts which will (I) prevent attainment or maintenance by any other State of any such national primary or secondary ambient air quality standard, or (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility, and (ii) insuring compliance with the requirements of section 126, relating to interstate pollution abatement;

[(F) it provides (i) necessary assurances that the State will have adequate personnel, funding, and authority to carry out such implementation plan, (ii) requirements for installation of equipment by owners or operators of stationary sources to monitor emissions from such sources, (iii) for periodic reports on the nature and amounts of such emissions, (iv) that such reports shall be correlated by the State agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection, (v) for authority comparable to that in section 303, and adequate contingency plans to implement such authority, and (vi) requirements that the State comply with the requirements respecting State boards under section 128;

[(G) it provides, to the extent necessary and practicable, for periodic inspection and testing of motor vehicles to enforce compliance with applicable emission standards;

[(H) it provides for revision, after public hearing, of such plan (i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of achieving such primary or secondary standard; or (ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to him that the plan is substantially inadequate to achieve the national ambient air quality primary or secondary standard which it implements or to otherwise comply with any additional requirements established under the Clean Air Act Amendments of 1977;

[(I) it provides that after June 30, 1979, no major stationary source shall be constructed or modified in any nonattainment area (as defined in section 171(2)) to which such plan applies, if the emissions from such facility will cause or contribute to concentrations of any pollutant for which a national ambient air quality standard is exceeded in such area, unless, as of the time of application for a permit for such construction or modification, such plan meets the requirements of part D (relating to nonattainment areas);

[(J) it meets the requirements of section 121 (relating to consultation), section 127 (relating to public notification), part C (relating to prevention of significant deterioration of air quality and visibility protection); and

[(K) it requires the owner or operator of each major stationary source to pay to the permitting authority as a condition of any permit required under this Act a fee sufficient to cover—

[(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

[(ii) if the owner or operator receives a permit for such source, whether before or after the date of enactment of this subparagraph, the reasonable costs (incurred after such date of enactment) of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action).]

(2) Each implementation plan submitted by a State under this Act shall be adopted by the State after reasonable notice and public hearing. Each such plan shall—

(A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act;

(B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to—

(i) monitor, compile, and analyze data on ambient air quality, and

(ii) upon request, make such data available to the Administrator;

(C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;

(D) contain adequate provisions—

(i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—

(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,

(ii) insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement);

(E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 128, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;

(F) require, as may be prescribed by the Administrator—

(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and

(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;

(G) provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;

(H) provide for revision of such plan—

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and

(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this Act;

(I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);

(J) meet the applicable requirements of section 121 (relating to consultation), section 127 (relating to public notification), and part C (relating to prevention of significant deterioration of air quality and visibility protection);

(K) provide for—

(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and

(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;

(L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover—

(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title IV;

(M) provide for consultation and participation by local political subdivisions affected by the plan;

(N) provide for establishment (consistent with the requirements of this Act) of a small source technical assistance entity that shall—

(i) offer to audit the operations of small sources to determine compliance with all requirements of this Act or offer to refer small sources to qualified auditors;

(ii) provide information on alternative technologies, including equipment, chemical products, and methods of operation, which will help reduce air pollution;

(iii) facilitate lawful cooperation among small generators and other persons where such cooperation would further comply with this Act; and

(O) no later than 4 years after the date of the enactment of the Clean Air Act Amendments of 1990, contain a permit program meeting the requirements of title IV.

(3)(A)***

* * * * *

[(D) Any applicable implementation plan for which an attainment date later than December 31, 1982, is provided pursuant to section 172(a)(2) shall be revised by July 1, 1979, to include the comprehensive measures and requirements referred to in subsection (c)(5)(B).

[(4) The procedure referred to in paragraph (2)(D) for review, prior to construction or modification, of the location of new sources shall (A) provide for adequate authority to prevent the construction or modification of any new source to which a standard of performance under section 111 will apply at any location which the State determines will prevent the attainment

or maintenance within any air quality control region (or portion thereof) within such State of a national ambient air quality primary or secondary standard, and (B) require that prior to commencing construction or modification of any such source, the owner or operator thereof shall submit to such State such information as may be necessary to permit the State to make a determination under clause (A).]

* * * * *

(c)[(1) The Administrator shall, after consideration of any State hearing record, promptly prepare and publish proposed regulations setting forth an implementation plan, or portion thereof, for a State if—

[(A) the State fails to submit an implementation plan which meets the requirements of this section,

[(B) the plan, or any portion thereof, submitted for such State is determined by the Administrator not to be in accordance with the requirements of this section, or]

(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator—

(A) finds that a State has failed to make a required submission or finds that the plan or plan revision submitted by the State does not satisfy the minimum criteria established under section 110(k)(1)(A), or

(B) disapproves a State implementation plan submission in whole or in part.

* * * * *

[(2)(A) The Administrator shall conduct a study and shall submit a report to the Committee on Interstate and Foreign Commerce of the United States House of Representatives and the Committee on Public Works of the United States Senate not later than three months after date of enactment of this paragraph on the necessity of parking surcharge, management of parking supply, and preferential bus/carpool lane regulations as part of the applicable implementation plans required under this section to achieve and maintain national primary ambient air quality standards. The study shall include an assessment of the economic impact of such regulations, consideration of alternative means of reducing total vehicle miles traveled, and an assessment of the impact of such regulations on other Federal and State programs dealing with energy or transportation. In the course of such study, the Administrator shall consult with other Federal officials including, but not limited to, the Secretary of Transportation, the Federal Energy Administrator, and the Chairman of the Council on Environmental Quality.]

* * * * *

[(C) The Administrator is authorized to suspend until January 1, 1975, the effective date or applicability of any regulations for the management of parking supply or any requirement that such regulations be a part of an applicable implementation plan approved or promulgated under this section. The exercise of the authority under this subparagraph shall not prevent the Administrator from approving such regulations if they are adopted and submitted by a State as part of an applicable implementation plan. If the Administrator exercises the authority under this subparagraph, regulations requiring a review or analysis of the impact of proposed parking facilities before construction which take effect on or after January 1, 1975, shall not apply to parking facilities on which construction has been initiated before January 1, 1975.]

* * * * *

[(4) In the case of any applicable implementation plan containing measures requiring—

[(A) retrofits on other than commercially owned in-use vehicles,

[(B) gas rationing which the Administrator finds would have seriously disruptive and widespread economic or social effects, or

[(C) the reduction of the supply of on-street parking spaces,

the Governor of the State may, after notice and opportunity for public hearing, temporarily suspend such measures notwithstanding the requirements of this section until January 1, 1979, or the date on which a plan revision under section 110(a)(2)(I) is submitted, whichever is earlier. No such suspension shall be granted unless the State agrees to prepare, adopt, and submit such plan revision as determined by the Administrator.]

(5)(A) Any measure in an applicable implementation plan which requires a toll or other charge for the use of a bridge located entirely within one city shall be eliminated from such plan by the Administrator upon application by the Governor of the State, which application shall include a certification by the Governor that he will revise such plan in accordance with subparagraph (B).

(B) In the case of any applicable implementation plan with respect to which a measure has been eliminated under subparagraph (A), such plan shall, not later than one year after the date of the enactment of this subparagraph, be revised to include comprehensive measures [(including the written evidence required by part D),] to:

* * * * *

[(e)(1) Upon application of a Governor of a State at the time of submission of any plan implementing a national ambient air quality primary standard, the Administrator may (subject to paragraph (2)) extend the three-year period referred to in subsection (a)(2)(A)(i) for not more than two years for an air quality control region if after review of such plan the Administrator determines that—

[(A) one or more emission sources (or classes of moving sources) are unable to comply with the requirements of such plan which implement such primary standard because the necessary technology or other alternatives are not available or will not be available soon enough to permit compliance within such three-year period, and

[(B) the State has considered and applied as a part of its plan reasonably available alternative means of attaining such primary standard and has justifiably concluded that attainment of such primary standard within the three years cannot be achieved.

[(2) The Administrator may grant an extension under paragraph (1) only if he determines that the State plan provides for—

[(A) application of the requirements of the plan which implement such primary standard to all emission sources in such region other than the sources (or classes) described in paragraph (1)(A) within the three-year period, and

[(B) such interim measures of control of the sources (or classes) described in paragraph (1)(A) as the Administrator determines to be reasonable under the circumstances.]

* * * * *

(g)(1) In the case of any State which has adopted and submitted to the Administrator a proposed plan revision which the State determines—

(A) meets the requirements of this section, and

(B) is necessary (i) to prevent the closing for one year or more of any source of air pollution, and (ii) to prevent substantial increases in unemployment which would result from such closing, and

which the Administrator has not approved or disapproved under this section within [the required four month period] 12 months of submission of the proposed plan revision, the Governor may issue a temporary emergency suspension of the part of the applicable implementation plan for such State which is proposed to be revised with respect to such source. The

determination under subparagraph (B) may not be made with respect to a source which would close without regard whether or not the proposed plan revision is approved.

* * * * *

(h)(1) Not later than [one year after the date of enactment of the Clean Air Act Amendments of 1977 and annually thereafter] 5 years after the date of the enactment of the Clean Air Act Amendments of 1990, and every 3 years thereafter, the Administrator shall assemble and publish a comprehensive document for each State setting forth all requirements of the applicable implementation plan for such State and shall publish notice in the Federal Register of the availability of such documents. [Each such document shall be revised as frequently as practicable but not less often than annually.]

* * * * *

(k) Environmental Protection Agency Action on Plan Submissions.—

(1) Completeness of plan submissions.—

(A) Completeness criteria.—Within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate minimum criteria that any plan submission must meet before the Administrator is required to act on such submission under this subsection. The criteria shall be limited to the information necessary to enable the Administrator to determine whether the plan submission complies with the provisions of this Act.

(B) Completeness finding.—Within 60 days of the Administrator's receipt of a plan or plan revision, but no later than 6 months after the date, if any, by which a State is required to submit the plan or revision, the Administrator shall determine whether each part of the plan or revision meets the minimum criteria established pursuant to subparagraph (A). Any plan or plan revision that a State submits to the Administrator, and that has not been determined by the Administrator (by the date 6 months after receipt of the submission) to have failed to meet the minimum criteria established pursuant to subparagraph (A), shall on that date be deemed by operation of law to meet such minimum criteria.

(C) Effect of finding of incompleteness.—Where the Administrator determines that a plan submission (or part thereof) does not meet the minimum criteria established pursuant to subparagraph (A), the State shall be treated as not having made the submission (or, in the Administrator's discretion, part thereof).

(2) Deadline for action.—Within 12 months of a determination by the Administrator (or a determination deemed by operation of law) under paragraph (1) that a State has submitted a plan or plan revision (or, in the Administrator's discretion, part thereof) that meets the minimum criteria established pursuant to paragraph (1), if applicable (or, if those criteria are not applicable, within 12 months of submission of the plan or revision), the Administrator shall act on the submission in accordance with paragraph (3).

(3) Full and partial approval and disapproval.—In the case of any submittal on which the Administrator is required to act under paragraph (2), the Administrator shall approve such submittal as a whole if it meets all of the applicable requirements of this Act. If a portion of the plan revision meets all the applicable requirements of this Act, the Administrator may approve the plan revision in part and disapprove the plan revision in part. The plan revision shall not be treated as meeting the requirements of this Act until the Administrator approves the entire plan revision as complying with the applicable requirements of this Act.

(4) Conditional approval.—The Administrator may approve a plan revision based on a commitment of the State to adopt specific enforceable measures by a date certain, but not later than 1 year after the date of approval of the plan revision. Any such conditional approval shall be treated as a disapproval if the State fails to comply with such commitment.

(5) Calls for plan revisions.—Whenever the Administrator finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the

interstate pollutant transport described in section 176A or section 184, or to otherwise comply with any requirement of this Act, the Administrator shall require the State to revise the plan as necessary to correct such inadequacies. The Administrator shall notify the State of the inadequacies, and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions. Such findings and notice shall be public. Any finding under this paragraph shall, to the extent the Administrator deems appropriate, subject the State to the requirements of this Act to which the State was subject when it developed and submitted the plan for which such finding was made, except that the Administrator may adjust any dates applicable under such requirements as appropriate (except that the Administrator may not adjust any attainment date prescribed under part D, unless such date has elapsed).

(6) Corrections.—Whenever the Administrator determines that the Administrator's action approving, disapproving, or promulgating any plan or plan revision (or part thereof), area designation, redesignation, classification, or reclassification was in error, the Administrator may in the same manner as the approval, disapproval, or promulgation revise such action as appropriate without requiring any further submission from the State. Such determination and the basis thereof shall be provided to the State and public.

(l) Plan Revisions.—Each revision to an implementation plan submitted by a State under this Act shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of this Act.

(m) Sanctions.—The Administrator may apply any of the sanctions listed in section 179(b) at any time (or at any time after) the Administrator makes a finding, disapproval, or determination under paragraphs (1) through (4), respectively, of section 179(a) in relation to any plan or plan item (as that term is defined by the Administrator) required under this Act, with respect to any portion of the State the Administrator determines reasonable and appropriate, for the purpose of ensuring that the requirements of this Act relating to such plan or plan item are met. The Administrator shall, by rule, establish criteria for exercising his authority under the previous sentence regarding application of sanctions to portions of a State not in a nonattainment area subject to this section or part D.

(n) Savings Clauses.—

(1) Existing plan provisions.—Any provision of any applicable implementation plan that was approved or promulgated by the Administrator pursuant to this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect as part of such applicable implementation plan, except to the extent that a revision to such provision is approved or promulgated by the Administrator pursuant to this Act.

(2) Attainment dates.—For any area not designated nonattainment, any plan or plan revision submitted or required to be submitted by a State—

(A) in response to the promulgation or revision of a national primary ambient air quality standard in effect on the date of the enactment of the Clean Air Act Amendments of 1990, or

(B) in response to a finding of substantial inadequacy under subsection (a)(2) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990),

shall provide for attainment of the national primary ambient air quality standards within 3 years of the date of the enactment of the Clean Air Act Amendments of 1990 or within 5 years of issuance of such finding of substantial inadequacy, whichever is later.

(3) Retention of construction moratorium in certain areas.—In the case of an area to which, immediately before the date of the enactment of the Clean Air Act Amendments of 1990, the prohibition on construction or modification of major stationary sources prescribed in subsection (a)(2)(I) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) applied by virtue of a finding of the Administrator that the State containing such area had not submitted an implementation plan meeting the requirements of section 172(b)(6) (relating to establishment of a permit program) (as in effect immediately before the date of enactment of the Clean Air Act Amendments of 1990) or 172(a)(1) (to the extent such requirements relate to provision for attainment of the primary national ambient air quality standard for sulfur oxides by December 31, 1982) as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, no major stationary source of the relevant air pollutant or pollutants shall be constructed or modified in such area until the Administrator finds that the plan for such area meets the applicable requirements of section 172(c)(5) (relating to permit programs) or subpart 5 of part D (relating to attainment of the primary national ambient air quality standard for sulfur dioxide), respectively.

(o) Indian Tribes.—If an Indian tribe submits an implementation plan to the Administrator pursuant to section 301(d), the plan shall be reviewed in accordance with the provisions for review set forth in this section for State plans, except as otherwise provided by regulation promulgated pursuant to section 301(d)(2). When such plan becomes effective in accordance with the regulations promulgated under section 301(d), the plan shall become applicable to all areas (except as expressly provided otherwise in the plan) located within the exterior boundaries of the reservation, notwithstanding the issuance of any patent and including rights-of-way running through the reservation.

(p) Reports.—Any State shall submit, according to such schedule as the Administrator may prescribe, such reports as the Administrator may require relating to emission reductions, vehicle miles traveled, congestion levels, and any other information the Administrator may deem necessary to assess the development effectiveness, need for revision, or implementation of any plan or plan revision required under this Act.

standards of performance for new stationary sources

Sec. 111. (a) For purposes of this section:

[(1) The term “standard of performance” means—

[(A) with respect to any air pollutant emitted from a category of fossil fuel fired stationary sources to which subsection (b) applies, a standard—

[(i) establishing allowable emission limitations for such category of sources, and

[(ii) requiring the achievement of a percentage reduction in the emissions from such category of sources from the emissions which would have resulted from the use of fuels which are not subject to treatment prior to combustion,

[(B) with respect to any air pollutant emitted from a category of stationary sources (other than fossil fuel fired sources) to which subsection (b) applies, a standard such as that referred to in subparagraph (A)(i); and

[(C) with respect to any air pollutant emitted from a particular source to which subsection (d) applies, a standard which the State (or the Administrator under the conditions specified in subsection (d)(2)) determines is applicable to that source and which reflects the degree of emission reduction achievable through the application of the best system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated for that category of sources.

For the purpose of subparagraphs (A) (i) and (ii) and (B), a standard of performance shall reflect the degree of emission limitation and the percentage reduction achievable through application of the best technological system of continuous

emission reduction which (taking into consideration the cost of achieving such emission reduction, any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. For the purpose of subparagraph (1)(A)(ii), any cleaning of the fuel or reduction in the pollution characteristics of the fuel after extraction and prior to combustion may be credited, as determined under regulations promulgated by the Administrator, to a source which burns such fuel.]

(1) The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

* * * * *

(3) The term "stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant. Nothing in title II of this Act relating to nonroad engines shall be construed to apply to stationary internal combustion engines.

* * * * *

(b)(1)(A)***

(B) Within [120 days] one year after the inclusion of a category of stationary sources in a list under subparagraph (A), the Administrator shall publish proposed regulations, establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within [90 days] one year after such publication, such standards with such modifications as he deems appropriate. The Administrator shall, at least every [four years] 8 years, review and, if appropriate, revise such standards following the procedure required by this subsection for promulgation of such standards. Notwithstanding the requirements of the previous sentence, the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard. Standards of performance or revisions thereof shall become effective upon promulgation. When implementation and enforcement of any requirement of this Act indicate that emission limitations and percent reductions beyond those required by the standards promulgated under this section are achieved in practice, the Administrator shall, when revising standards promulgated under this section, consider the emission limitations and percent reductions achieved in practice.

* * * * *

(d)(1) The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section 110 under which each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under section 108(a) [or 112(b)(1)(A)] or emitted from a source category which is regulated under section 112 but (ii) to which a standard of performance under this section would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such standards of performance. Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.

* * * * *

(f)[(1) Not later than one year after the date of enactment of this subsection, the Administrator shall promulgate regulations listing under subsection (b)(1)(A) the categories of major stationary sources which are not on the date of the enactment of this subsection included on the list required under subsection (b)(1)(A). The Administrator shall promulgate regulations establishing standards of performance for the percentage of such categories of sources set forth in the following table before the expiration of the corresponding period set forth in such table:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(1) For those categories of major stationary sources that the Administrator listed under subsection (b)(1)(A) before the date of the enactment of the Clean Air Act Amendments of 1990 and for which regulations had not been proposed by the Administrator by such date, the Administrator shall:

(A) propose regulations establishing standards of performance for at least 25 percent of such categories of sources within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990;

(B) propose regulations establishing standards of performance for at least 50 percent of such categories of sources within 4 years after the date of the enactment of the Clean Air Act Amendments of 1990; and

(C) propose regulations for the remaining categories of sources within 6 years after the date of the enactment of the Clean Air Act Amendments of 1990.

* * * * *

[national emission standards for hazardous air pollutants

[Sec. 112. (a) For purposes of this section—

[(1) The term “hazardous air pollutant” means an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the Administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

[(2) The term “new source” means a stationary source the construction or modification of which is commenced after the Administrator proposes regulations under this section establishing an emission standard which will be applicable to such source.

[(3) The terms “stationary source,” “modification,” “owner or operator” and “existing source” shall have the same meaning as such terms have under section 111(a).

[(b)(1)(A) The Administrator shall, within 90 days after the date of enactment of the Clean Air Amendments of 1970, publish (and shall from time to time thereafter revise) a list which includes each hazardous air pollutant for which he intends to establish an emission standard under this section.

[(B) Within 180 days after the inclusion of any air pollutant in such list, the Administrator shall publish proposed regulations establishing emission standards for such pollutant together with a notice of a public hearing within thirty days. Not later than 180 days after such publication, the Administrator shall prescribe an emission standard for such pollutant, unless he finds, on the basis of information presented at such hearings, that such pollutant clearly is not a hazardous air pollutant. The Administrator shall establish any such standard at the level which in his judgment provides an ample margin of safety to protect the public health from such hazardous air pollutant.

[(C) Any emission standard established pursuant to this section shall become effective upon promulgation.

[(2) The Administrator shall, from time to time, issue information on pollution control techniques for air pollutants subject to the provisions of this section.

[(c)(1) After the effective date of any emission standard under this section—

[(A) no person may construct any new source or modify any existing source which, in the Administrator's judgment, will emit an air pollutant to which such standard applies unless the Administrator finds that such source if properly operated will not cause emissions in violation of such standard, and

[(B) no air pollutant to which such standard applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source—

[(i) such standard shall not apply until 90 days after its effective date, and

[(ii) the Administrator may grant a waiver permitting such source a period of up to two years after the effective date of a standard to comply with the standard, if he finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

[(2) The President may exempt any stationary source from compliance with paragraph (1) for a period of not more than two years if he finds that the technology to implement such standards is not available and the operation of such source is required for reasons of national security. An exemption under this paragraph may be extended for one or more additional periods, each period not to exceed two years. The President shall make a report to Congress with respect to each exemption (or extension thereof) made under this paragraph.

[(d)(1) Each State may develop and submit to the Administrator a procedure for implementing and enforcing emission standards for hazardous air pollutants for stationary sources located in such State. If the Administrator finds the State procedure is adequate, he shall delegate to such State any authority he has under this Act to implement and enforce such standards.

[(2) Nothing in this subsection shall prohibit the Administrator from enforcing any applicable emission standard under this section.

[(e)(1) For purposes of this section, if in the judgment of the Administrator, it is not feasible to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, he may instead promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in his judgment is adequate to protect the public health from such pollutant or pollutants with an ample margin of safety. In the event the Administrator promulgates a design or equipment standard under this subsection, he shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

[(2) For the purpose of this subsection, the phrase “not feasible to prescribe or enforce an emission standard” means any situation in which the Administrator determines that (A) a hazardous pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State, or local law, or (B) the application of measurement methodology to a particular class of sources is not practicable due to technological or economic limitations.

[(3) If after notice and opportunity for public hearing, any person establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such air pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

[(4) Any standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it becomes feasible to promulgate and enforce such standard in such terms.

[(5) Any design, equipment, work practice, or operational standard, or any combination thereof, described in this subsection shall be treated as an emission standard for purposes of the provisions of this Act (other than the provisions of this subsection).]

SEC. 112. HAZARDOUS AIR POLLUTANTS.

(a) Definitions.—For the purposes of this section—

(1) Major source.—The term “major source”, for pollutants other than radionuclides, means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 metric tons per year or more of any hazardous air pollutant or 25 metric tons per year or more of any combination of hazardous air pollutants which have been listed pursuant to subsection (b). The Administrator may establish a lesser quantity for a major source other than specified in the previous sentence on the basis of the potency, characteristics of the air pollutant, or other relevant factors. For radionuclides, such term shall have the meaning specified by the Administrator by rule, considering radiation dose.

(2) Area source.—The term “area source” means any source that is not a major source but that is a member of a source category listed under this section based on aggregate emissions, or potential aggregate emissions, of a listed pollutant or pollutants.

(3) New source.—The term “new source” means a stationary source the construction or reconstruction of which is commenced after the Administrator proposes regulations under this section establishing an emission standard applicable to such source category or subcategory pursuant to subsection (d) or (f).

(4) Electric utility.—The term “electric utility steam generating unit” means any fossil fuel fired steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the facility.

(5) Other terms.—The terms “stationary source”, “owner or operator”, and “existing” source shall have the same meaning as such terms have under section 111(a).

(b) Hazardous Air Pollutant List.—

(1) Establishment of list.—The Congress establishes for purposes of this section a list of hazardous air pollutants as follows:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(2) Additions and deletions.—The Administrator may add or delete a substance from the list under paragraph (1).

(A) Additions.—A substance may be added to the list under paragraph (1) if the Administrator determines in the Administrator's judgment that the substance is an air pollutant and that there is sufficient evidence to establish that the pollutant is known to cause or can reasonably be anticipated to cause in humans one or more of the following:

- (i) cancer or developmental effects, or
- (ii) serious or irreversible—
 - (I) reproductive dysfunctions,
 - (II) neurological disorders,
 - (III) heritable gene mutations,
 - (IV) other chronic health effects, or
 - (V) adverse acute human health effects.

(B) Deletions.—The Administrator may delete a pollutant from the list under paragraph (1) if the Administrator determines that the criteria described in subparagraph (A) do not apply. For pollutants on the list which do not have a CAS number and which are comprised of more than one unique chemical substance, the Administrator may determine that one or more of such substances shall not be considered a hazardous air pollutant if the Administrator determines that such substance or substances do not meet the criteria described in subparagraph (A).

(C) Further information.—If the Administrator determines that information on the health effects of a substance is not sufficient to make a determination required by this paragraph, the Administrator may use any authority available to the Administrator to acquire such information.

(3) Petitions.—Beginning at any time after the list is published under subsection (c), any person may petition the Administrator to modify the list of hazardous air pollutants under this subsection by adding or deleting a substance. Within 18 months after receipt of a petition, the Administrator shall either grant or deny the petition by publishing a written explanation of the reasons for the Administrator's decision. Any such petition shall include a showing by the petitioner that there is adequate data on the health effects of the pollutant or other evidence adequate to support the petition. The Administrator may not deny a petition solely on the basis of inadequate resources or time for review. No air pollutant which is listed under section 108(a) may be added to the list under this section.

(4) Review.—The Administrator shall periodically review the list established by this subsection and publish the results thereof and, where appropriate, revise such list by rule.

(c) Source Category List.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish, and shall from time to time, but no less often than every 8 years, revise, if appropriate, in response to public comment or new information, a list of all categories and subcategories of major sources and area sources designated under paragraph (3) of the air pollutants listed pursuant to subsection (b)(1).

(2) For the categories and subcategories the Administrator lists, the Administrator shall establish emission standards under subsection (d), according to the schedule in subsection (e).

(3) The Administrator shall list and designate, based on actual or estimated aggregate emissions of a listed pollutant or pollutants, sufficient categories and subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of each hazardous air pollutant are subject to regulation under this section. For purposes of this section, the term “area sources” shall not include motor vehicles or nonroad vehicles subject to regulation under title II.

(4) The Administrator may, in the Administrator's discretion, list any category or subcategory previously regulated under this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

(5) The Administrator may decide not to list a source category or subcategory, and the Administrator may withdraw a source category or subcategory from the list under this subsection, on petition of any person or on the Administrator's own motion, whenever the Administrator makes the following determination or determinations, as applicable:

(A) In the case of hazardous air pollutants emitted by sources in the category or subcategory that may result in cancer in humans, a determination that no source in the category or subcategory (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

(B) In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) exceed a level which is adequate to protect public health with an ample margin of safety.

The Administrator shall grant or deny a petition under this paragraph within 1 year after the petition is filed.

(6) The Administrator shall establish a separate category or subcategory covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. For purposes of this section, "research or laboratory facility" means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

(d) Maximum Achievable Control Technology Emission Standards.—(1) The Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources in accordance with the schedule provided in subsection (e). The Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards. The Administrator may set standards for emissions of radionuclides from a category or subcategory separately from regulating other listed pollutants emitted by that category or subcategory.

(2) Emission standards promulgated under this subsection shall be applicable to new and existing major sources and area sources in each category or subcategory, and shall require the maximum degree of reduction in emissions of the air pollutants subject to this section (including a prohibition of such emissions, if achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality and other air quality-related health and environmental impacts, and energy requirements, determines is achievable through application of measures, processes, methods, systems or techniques including measures which—

(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications such as reuse or recycling;

(B) enclose systems or processes to eliminate emissions;

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point;

(D) are design, equipment, work practice or operational methods, or radiation dose standards;

(E) establish requirements for operator training or certification; or

(F) are a combination of the above.

If the Administrator finds that it is not feasible to prescribe or enforce an emission standard, the Administrator may instead issue regulations requiring any of the measures identified in this paragraph, or any combination of such measures. None of the measures described in subparagraphs (A) through (D) shall, consistent with the provisions of section 114(c), in any way compromise any United States patent or United States trademark right, or any confidential business information, or any trade secret or any other intellectual property right.

(3) The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emissions standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall be at least as stringent as the emissions controls achieved in practice by the best controlled similar sources. Consistent with the preceding

provisions of this paragraph, these determinations for new and existing sources, shall take into account energy, environmental, economic impacts, and other costs as well as any other factors identified by the Administrator by rule. If the Administrator finds that no similar source employs controls reflecting the maximum available control technology, the Administrator may establish emissions standards or regulations meeting the requirements of this section without regard to the performance of similar sources. Emission standards under this section for radionuclides shall be set based upon radiation dose.

(4) Emission standards or other regulations promulgated under this subsection shall be effective upon promulgation.

(5) In promulgating emission standards for a source category under this subsection, the Administrator shall prescribe a date for compliance with the standards for existing sources. In no event shall such date be later than 3 years after promulgation of the standards.

(6) With respect only to categories and subcategories of area sources listed pursuant to subsection (c), the Administrator may, in lieu of the authorities provided in paragraph (2) and subsection (f), elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of listed hazardous air pollutants.

(7) The Administrator shall from time to time, but no less often than every 8 years after promulgation of standards under this subsection, review and, if appropriate, revise such standards.

(e) Schedule for Standards.—(1) The Administrator shall promulgate standards for categories and subcategories listed under subsection (c) according to the following schedule:

(A) Emission standards for not less than 10 categories or subcategories shall be promulgated not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(B) Emission standards for 25 per centum of the listed categories and subcategories shall be promulgated not later than 4 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(C) Emission standards for an additional 25 per centum of the listed categories and subcategories shall be promulgated not later than 7 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(D) Emission standards for the remaining categories and subcategories shall be promulgated not later than 10 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(E) In the case of source categories and subcategories listed after publication of the initial list required under subsection (c)(1), emission standards under this section for the category or subcategory shall be promulgated within 10 years after the date of the enactment of the Clean Air Act Amendments of 1990, or within 2 years after the date on which such category or subcategory is listed, whichever is later.

(2) In determining priorities for promulgating standards under subsection (d), the Administrator shall consider—

(A) the quantity and location of emissions or reasonably anticipated emissions of air pollutants subject to this section that each category or subcategory will emit;

(B) the known or anticipated adverse effects of such pollutants on public health; and

(C) the efficiency of grouping categories or subcategories according to the pollutants emitted, or the processes or technologies used.

(f) Residual Risk.—(1) Not later than 8 years after the date of the enactment of the Clean Air Act Amendments of 1990 the Administrator shall investigate and report, after consultation with the Surgeon General and after an opportunity for public comment, to Congress on:

(A) Methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d).

(B) The public health significance of such estimated remaining risk and the technologically and commercially available methods and costs of reducing such risks.

(C) The actual health effects with respect to persons living in the vicinity of sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assessment methodology or other health assessment technique, and any negative health consequences to the community of efforts to reduce such risks.

(D) Recommendations as to legislation regarding such remaining risk.

(2) If Congress does not act on any recommendation submitted under paragraph (1), the Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to subsection (d), promulgate standards for such category or subcategory in accordance with this section (as in effect before the date of the enactment of the Clean Air Act Amendments of 1990) if promulgation of such standards is required in order, in the Administrator's judgment, to provide an ample margin of safety to protect public health in accordance with this section (as in effect before the date of the enactment of the Clean Air Act Amendments of 1990). The Administrator shall determine whether or not to promulgate such standards, and if the Administrator decides to promulgate such standards, shall promulgate the standards, 8 years after promulgation of the standards under subsection (d) for each source category or subcategory concerned. In the case of categories or subcategories for which standards under subsection (d) are required to be promulgated within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall have 9 years after promulgation of standards under subsection (d) to make the determination under the preceding sentence and, if required, to promulgate the standards under this paragraph. Nothing in subsection (c)(5) or (g)(1)(A) or in any other provision of this section shall be construed as affecting, or applying to, the Administrator's interpretation of this section, as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

(3) Any emission standard established pursuant to this subsection shall become effective upon promulgation.

(4) No air pollutant to which a standard under this subsection applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source—

(A) such standard shall not apply until 90 days after its effective date, and

(B) the Administrator may grant a waiver permitting such source a period of up to 2 years after the effective date of a standard to comply with the standard if the Administrator finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

(g) Alternative Emissions Limitations.—(1) Notwithstanding the requirements of subsection (d), a State with a program approved under title IV, may issue a permit that authorizes—

(A) a major source (or area sources in a category or subcategory in an area) to comply with alternative emission limitations in lieu of standards under this section, if the owner or operator presents evidence sufficient to demonstrate that emissions from the source (or such area sources) in compliance with such limitations—

(i) in the case of hazardous air pollutants emitted by the source (or such area sources) which may result in cancer in humans, do not cause a lifetime risk of cancer greater than one in 1,000,000 to the actual person who is most exposed to emissions of such pollutants from such source (or group of sources in the case of area sources); and

(ii) in the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer, do not exceed a level which is adequate to protect public health with an ample margin of safety;

(B)(i) any existing source, for which the owner or operator demonstrates that it has achieved a reduction of 90 percent or more in emissions of listed pollutants (95 percent or more in the case of listed particulate pollutants) from the source before proposal of an applicable standard promulgated pursuant to subsection (d), to meet emission limitations based on such reduction in lieu of such standard for a period of 5 years from the otherwise applicable compliance date; the reduction shall be determined with respect to verifiable and actual emissions on an annual average basis and in a base year not earlier than calendar year 1987, unless emissions in the base year are artificially or substantially greater than emissions in other years before implementation of emissions reduction measures;

(ii) any existing source to comply with a standard under subsection (d) 5 years after promulgation if the source, within 5 years before proposal of the standard under subsection (d), has achieved a level of emission rate or emission reduction which complies (or would comply if the source is not subject to such standards) with the best available control technology determination (as defined in section 169(3)), which is applicable to the source category and prevailing at the time the reduction is achieved; and

(iii) any existing source to comply with a standard under subsection (d) 5 years after promulgation if the source, within 5 years before proposal of the standard under subsection (d), has achieved a level of emission rate or emission reduction which complies (or would comply if the source is not subject to such standard) with the lowest achievable emissions rate (as defined by section 171) which is applicable to the source category and prevailing at the time the reduction is achieved.

The Administrator shall review emissions from sources subject to emissions limitations under subparagraph (B) according to subsection (f) at the same time that other sources in the category or subcategory are reviewed.

(2) The Administrator shall promulgate regulations to carry out paragraph (1) as expeditiously as practicable, but not later than 24 months after the date of the enactment of the Clean Air Act Amendments of 1990.

(3) Rules published pursuant to paragraph (1) may identify categories or subcategories of sources listed under subsection (c) for which no alternative emission limitations may be established, including categories or subcategories of area sources for which emission standards are promulgated to control combined emissions from sources, rather than emissions of individual sources.

(4) The regulations under paragraph (1) shall establish methods for assessing the significance of public health risks and methods for evaluating evidence presented by an owner or operator applying for alternative emissions limitations under this subsection. Any modeling demonstration performed to support a showing under subsection (g)(1)(A) shall comply with such regulations. Any stack height credit used in a modeling demonstration shall be based on the lesser of actual stack height of the source as it existed on January 1, 1989, or the stack height credit as provided in regulations issued by the Administrator.

(5) An existing source which achieves the reduction referred to in paragraph (1)(B)(i) after the proposal of an applicable standard but before January 1, 1994, may qualify under paragraph (1)(B)(i) if the source makes an enforceable commitment

to achieve such reduction before the proposal of the standard. Such commitment shall be enforceable to the same extent as a regulation under this section.

(6) Any State with a program approved under title IV may issue a permit that grants an extension permitting an existing source up to 2 additional years to comply with standards under subsection (d) if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations if the 5-year compliance time is insufficient to dry and cover mining waste in order to reduce emissions of any pollutant listed under subsection (b).

(7) No alternative emission limitation under this paragraph shall take effect until it is approved by the Administrator.

(8) If the State in which a source is located does not have a program approved under title IV, the Administrator may grant any extensions authorized under this subsection for such source.

(h) Preconstruction and Operating Requirements.—After the effective date of any standard or under subsection (d) or (f), or an alternative emission limitation under subsection (g)—

(1) no person may construct any new major source subject to such emission standard or limitation unless the Administrator, or a State with a permit program approved under title IV, determines that such source, if properly constructed and operated, will comply with the standard or limitation; and

(2) no person may operate any new or existing source subject to an emission standard or limitation except in compliance with such standard or limitation (and any schedule which is applicable under subsection (d)(5) or (f)(4)).

(i) Technical Assistance.—The Administrator shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring. The Administrator shall use the authority of section 103 to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks. Where appropriate, such activity shall be conducted with not-for-profit organizations.

(j) Presidential Exemption.—The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for one or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to each exemption (or extension thereof) made under this subsection.

(k) Savings Provision.—(1) Any standard under this section in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in force and effect after such date unless modified as provided in this section before the date of the enactment of such Amendments or under such Amendments. Each such standard shall be reviewed and, if appropriate, revised, to comply with the requirements of subsection (d) within 10 years after the date of the enactment of the Clean Air Act Amendments of 1990. If a timely petition for review of any such standard under section 307 is pending on such date of enactment, the standard shall be upheld if it complies with this section as in effect before that date. If any such standard is remanded to the Administrator, the Administrator may in the Administrator's discretion apply either the requirements of this section, or those of this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990.

(2) Notwithstanding paragraph (1), no standard shall be established under this section, as amended by the Clean Air Act Amendments of 1990, for radionuclide emissions from (A) elemental phosphorous plants, (B) grate calcination elemental phosphorous plants, (C) phosphogypsum stacks, or (D) any subcategory of the foregoing. This section, as in effect prior to

the date of the enactment of the Clean Air Act Amendments of 1990, shall remain in effect for radionuclide emissions from such plants and stacks.

(3) Notwithstanding section 307 of this Act, no action of the Administrator adding a pollutant to the list under subsection (b), listing or designating a source category or subcategory under subsection (c), or determining whether or not to promulgate a standard under subsection (f)(2), shall be final agency action subject to judicial review, except that any such action may be reviewed under such section 307, if otherwise final, when the Administrator issues emission standards for such pollutant or category.

(l) Electric Utilities.—The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) after imposition of the requirements of this Act. The Administrator shall report the results of this study to the Congress within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required in this subsection.

(m) Accident Prevention, Detection, and Response.—

(1) Regulations and guidance.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate, in consultation and coordination with the Secretaries of Transportation and Labor and the laws administered by the Secretaries, reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases into the ambient air of an air pollutant listed under this subsection from a stationary source subject to standards promulgated under this section and for response to such releases by the owners or operators thereof. The Administrator shall utilize the expertise of such Secretaries and others in promulgating such regulations. As appropriate, such regulations shall cover the use, operation, repair, replacement, and maintenance of equipment to monitor, detect, inspect, and control such releases, including the training of persons in the use and maintenance of such equipment and in the conduct of periodic inspections. The regulations shall include procedures and measures for emergency response after an accidental release in order to protect public health and the environment. The regulations shall cover storage, as well as operations. To ensure effectiveness, reasonableness, and avoidance of duplication, such regulations shall be promulgated and implemented in a manner consistent with other applicable law, including the other provisions of this section, and consolidated to the maximum extent practicable with similar requirements under other law. The regulations shall, to the greatest extent possible, recognize differences in size, operations, processes, class and categories of sources, and the voluntary actions of such sources to prevent such releases and respond to such releases. The regulations shall take effect 3 years after the date of promulgation, or 3 years after the addition of a substance to the list under this subsection, whichever is later.

(2) List.—As part of the regulations under paragraph (1), the Administrator shall promulgate an initial list of significant air pollutants which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause serious adverse effects to public health and the environment. For purposes of promulgating such list, the Administrator shall use the list of extremely hazardous substances published under the Superfund Amendments and Reauthorization Act of 1986, with such modifications as the Administrator deems appropriate. The list shall include ammonia (CAS Number 7664417) and hydrogen sulfide (CAS Number 7783064). The regulations shall include an explanation of the basis for establishing the list. The list may be revised from time to time by the Administrator and shall be reviewed at least every 5 years. No air pollutant for which a national primary ambient air quality standard has been established shall be included on any such list. No substance, practice, process, or activity regulated under part B shall be subject to regulation under this subsection. At the time any air pollutant is listed, the Administrator shall establish a reasonable minimum quantity for the pollutant, taking into account toxicity, dispersibility, combustibility, or flammability and the likelihood of an accidental release.

(3) Definitions.—For purposes of this subsection:

(A) Release.—The term “release” means the direct or indirect introduction of any substance into the ambient air.

(B) Accidental release.—The term “accidental release” means a release which is not routine and which is not authorized pursuant to any permit or emission limitation or standard under this Act or any other provision of Federal or State law.

(n) Protection of Great Lakes and Chesapeake Bay.—

(1) Study and report to congress.—The Administrator shall investigate the sources of atmospheric deposition of hazardous air pollutants (and their atmospheric transformation products) on the Great Lakes, the Chesapeake Bay, and their tributary waters and evaluate the adverse effects to human health and the adverse environmental effects, including the tendency to bioaccumulate and effects resulting from indirect exposure pathways, caused by such deposition. Such investigation and evaluation shall include monitoring of listed substances in the ambient air, biological sampling for such substances (or their organic forms) in fish and wildlife within the Great Lakes, the Chesapeake Bay, and their tributary waters, and an analysis to characterize the sources of such substances. The Administrator shall report to Congress on the results of the investigation and evaluation within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall afford an opportunity for public review of the report before submitting it to Congress and shall include a summary of the public comments with the report.

(2) Additional regulation.—As part of the report to Congress, the Administrator shall determine whether the other provisions of this section are adequate to prevent serious adverse effects to human health and serious or widespread environmental effects, including such effects resulting from indirect exposure pathways, associated with atmospheric deposition on the Great Lakes, the Chesapeake Bay, and their tributary waters of hazardous air pollutants (and their atmospheric transformation products). The Administrator shall take into consideration the tendency of such pollutants to bioaccumulate. Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, based on such report and determination, promulgate, in accordance with this section, such further emissions standards or control measures as may be necessary and appropriate to prevent such effects, including effects due to bioaccumulation and indirect exposure pathways.

(o) Technical Assistance for Small Sources.—The Administrator (and States with permit programs) shall establish means and measures to supply technical assistance and information to area sources and stationary sources that are not major stationary sources to help carry out the requirements of this section, including meeting the applicable standards and obtaining needed permits. The assistance should cover information on availability and types of equipment, measures, methods, practices, processes, and techniques in reducing emissions of air pollutants and preventing and detecting accidents. The Administrator should establish and maintain a clearinghouse of such information.

(p) Hydrofluoric Acid.—(1) Not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study to determine if there is a net benefit to public safety, human health, and the environment from the use by oil refineries of any substance or process which is an alternative to hydrofluoric acid. The study shall include an analysis of the loss of human life or damage to human health in the event of a reasonable worst-case accidental release of hydrofluoric acid or sulfuric acid or other alternative substance, the customary air and water emissions associated with the use of hydrofluoric acid or sulfuric acid or other alternative, the production of waste from the customary use of hydrofluoric acid or sulfuric acid or other alternative, and the risk and consequences of accidents from the transportation of hydrofluoric acid or sulfuric acid or other alternative. In making the determination regarding net benefit, the Administrator shall not consider the financial costs associated with the use of any alternative accidental release mitigation systems which could be rendered inoperable in the event of an earthquake, or the cause of a worst-case accidental release. In making the determination regarding net benefit, if the Administrator considers the likelihood of the risk or danger to human health and the environment from a worst-case accidental hydrofluoric acid release, the Administrator shall also consider similar probabilities resulting from the use of any alternative. In the event that existing data on hydrofluoric acid or sulfuric acid or alternative

proves inadequate for the study, the Environmental Protection Agency shall perform the necessary data collection or field tests. The study shall examine both acute and chronic risks.

(2) If the Administrator determines there is an alternative that provides a net benefit to public safety, human health, and the environment, not later than 1 year and 3 months after the completion of the study under paragraph (1), the Administrator shall promulgate regulations requiring each oil refinery in the Nation to convert to such alternative within 10 years. The Administrator is authorized to make differing determinations on a site-specific basis.

(3) Not later than 2 years after the completion of the study under paragraph (1), the Administrator shall make recommendations to Congress, and is authorized to promulgate regulations to implement, methods to mitigate or eliminate the danger of a worst-case accidental release of hydrofluoric acid at all other commercial facilities, including the use of alternative processes or substances which provide a net benefit to public safety, human health, and the environment, and relocation of facilities to unpopulated areas.

(q) Mickey Leland Urban Air Toxics Research Center.—

(1) Establishment.—The Administrator shall oversee the establishment of a National Urban Air Toxics Research Center, to be located at a university, a hospital, or other facility capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics. The center shall be known as the Mickey Leland National Urban Air Toxics Research Center. The geographic site of the National Urban Air Toxics Research Center should be further directed to Harris County, Texas, in order to take full advantage of the well developed scientific community presence currently on site at the Texas Medical Center as well as the extensive data previously compiled from the comprehensive monitoring system currently in place.

(2) Board of directors.—The National Urban Air Toxics Research Center shall be governed by a Board of Directors to be comprised of 9 members, the appointment of which shall be allocated pro rata among the Speaker of the House, the majority leader of the Senate and the President. The members of the Board of Directors shall be selected based on their respective academic and professional backgrounds and expertise in matters relating to public health, environmental pollutions, and the industrial hygiene. The duties of the Board of Directors shall be to determine policy and research guidelines, submit views from center sponsors and the public and issue periodic reports of center fundings and activities.

(3) Scientific advisory panel.—The Board of Directors shall be advised by a Scientific Advisory Panel, the 13 members of which shall be appointed by the Board, and to include eminent members of the scientific and medical communities. The Panel membership may include scientists with relevant experience from the National Institute of Environmental Health Sciences, the Center for Disease Control, the Environmental Protection Agency, the National Cancer Institute, and others, and the Panel shall conduct peer review and evaluate research results. The Panel shall assist the Board in developing the research agenda, reviewing proposals and applications, and advise on the awarding of research grants.

(4) Findings.—The center shall be established and funded with both Federal and private source funds.

(r) Oil and Gas Wells.—(1) Notwithstanding the provisions of this section, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

(2) In the case of oil and gas wells listed under this section, in promulgating regulations under this section, the Administrator shall determine whether oil and gas wells present a risk greater than that referred to in subsection (g)(1)(A). If the

Administrator determines that such wells do present a risk greater than the levels referred to in subsection (g)(1)(A) the Administrator shall promulgate standards under this section applicable to such wells.

(s) **Coke Oven Production Technology Study.**—(1) The Secretary of Energy and the Administrator shall jointly undertake a 6-year study to assess coke oven production emission control technologies and to assist in the development and commercialization of technically practicable and economically viable control technologies which will have the potential to significantly reduce emissions of hazardous air pollutants from coke oven production facilities. In identifying control technologies, the Secretary and the Administrator shall consider the range of existing coke oven operations and battery design and the availability of sources of materials for such ovens as well as alternatives to existing coke oven production design.

(2) The Secretary and the Administrator are authorized to enter into agreements with persons who propose to develop, install, and operate coke production emission control technologies which have the potential for significant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 percent of the cost of any project assisted pursuant to this subsection.

(3) The Secretary shall prepare annual reports to Congress on the status of the research program and at the completion of the study shall make recommendations to the Administrator identifying practicable and economically viable control technologies for coke oven production facilities to reduce residual risks remaining after implementation of the standard under subsection (d) (MACT).

(4) There are authorized to be appropriated \$5,000,000 for each of the fiscal years 1991 through 1996 to carry out the program authorized by this subsection.

(t) **Report on Costs and Benefits.**—Commencing on January 1, three years after the date of the enactment of the Clean Air Act Amendments of 1990 and annually thereafter, the Government Accounting Office, in consultation with other agencies, such as the Environmental Protection Agency, the Department of Labor, the Department of Commerce, the United States Trade Representative, the National Academy of Sciences, the National Academy of Engineering, the Council on Environmental Quality, and the Surgeon General, shall provide a report to Congress on the incremental human health and environmental benefits and incremental costs associated with compliance with the provisions of the Maximum Achievable Control Technologies prescribed by the Clean Air Act Amendments of 1990. The report shall include, for each source category and subcategory for which MACT is prescribed, the effects on human life, human health, the environment, and the economy (including both positive impacts and impacts detrimental to jobs and communities resulting from loss of employers and employment, etc.), energy security impacts, the actual emissions reductions as a result of the Clean Air Act Amendments of 1990, the effect on United States products and industrial competitiveness in national and international markets and any impacts on employment in the affected areas contributed to by the emission control requirements.

[federal enforcement

[Sec. 113. (a)(1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any requirement of an applicable implementation plan, the Administrator shall notify the person in violation of the plan and the State in which the plan applies of such finding. If such violation extends beyond the 30th day after the date of the Administrator's notification, the Administrator may issue an order requiring such person to comply with the requirements of such plan or he may bring a civil action in accordance with subsection (b).

[(2) Whenever, on the basis of information available to him, the Administrator finds that violations of an applicable implementation plan are so widespread that such violations appear to result from a failure of the State in which the plan applies to enforce the plan effectively, he shall so notify the State. If the Administrator finds such failure extends beyond the thirtieth day after such notice, he shall give public notice of such finding. During the period beginning with such public notice and

ending when such State satisfies the Administrator that it will enforce such plan (hereafter referred to in this section as “period of federally assumed enforcement”), the Administrator may enforce any requirement of such plan with respect to any person—

[(A) by issuing an order to comply with such requirement, or

[(B) by bringing a civil action under subsection (b).

[(3) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of section 111(e) (relating to new source performance standards), 112(c) (relating to standards for hazardous emissions), or 119(g) (relating to energy-related authorities), or is in violation of any requirement of section 114 (relating to inspections, etc.), he may issue an order requiring such person to comply with such section or requirement, or he may bring a civil action in accordance with subsection (b).

[(4) An order issued under this subsection (other than an order relating to a violation of section 112) shall not take effect until the person to whom it is issued has had an opportunity to confer with the Administrator concerning the alleged violation. A copy of any order issued under this subsection shall be sent to the State air pollution control agency of any State in which the violation occurs. Any order issued under this subsection shall state with reasonable specificity the nature of the violation, specify a time for compliance which the Administrator determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. In any case in which an order under this subsection (or notice to a violator under paragraph (1)) is issued to a corporation, a copy of such order (or notice) shall be issued to appropriate corporate officers.

[(5) Whenever, on the basis of information available to him, the Administrator finds that a State is not acting in compliance with any requirement of the regulation referred to in section 129(a)(1) of the Clean Air Act Amendments of 1977 (relating to certain interpretative regulations) or any plan provisions required under section 110(a)(2)(I) and part D, he may issue an order prohibiting the construction or modification of any major stationary source in any area to which such provisions apply or he may bring a civil action under subsection (b)(5).

[(b) The Administrator shall in the case of any person which is the owner or operator of a major stationary source, and may, in the case of any other person, commence a civil action for a permanent or temporary injunction, or to assess and recover a civil penalty of not more than \$25,000 per day of violation, or both, whenever such person—

[(1) violates or fails or refuses to comply with any order issued under subsection (a); or

[(2) violates any requirement of an applicable implementation plan (A) during any period of federally assumed enforcement, or (B) more than 30 days after having been notified by the Administration under subsection (a)(1) that such person is violating such requirement; or

[(3) violates section 111(e), 112(c), section 119(g) (as in effect before the date of the enactment of the Clean Air Act Amendments of 1977), subsection (d)(5) (relating to coal conversion), section 320 (relating to cost of certain vapor recovery), section 119 (relating to smelter orders), or any regulation under part B (relating to ozone); or

[(4) fails or refuses to comply with any requirement of section 114 or subsection (d) of this section; or

[(5) attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) has been made.

[The Administrator may commence a civil action for recovery of any noncompliance penalty under section 120 or for recovery of any nonpayment penalty for which any person is liable under section 120 or for both. Any action under this

subsection may be brought in the district court of the United States for the district in which the violation occurred or in which the defendant resides or has his principal place of business, and such court shall have jurisdiction to restrain such violation, to require compliance, to assess such civil penalty and to collect any noncompliance penalty (and nonpayment penalty) owed under section 120. In determining the amount of any civil penalty to be assessed under this subsection, the court shall take into consideration (in addition to other factors) the size of the business, the economic impact of the penalty on the business, and the seriousness of the violation. Notice of the commencement of such action shall be given to the appropriate State air pollution control agency. In the case of any action brought by the Administrator under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to the party or parties against whom such action was brought in any case where the court finds that such action was unreasonable.

[(c)(1) Any person who knowingly—

[(A) violates any requirement of an applicable implementation plan (i) during any period of federally assumed enforcement, or (ii) more than 30 days after having been notified by the Administration under subsection (a)(1) that such person is violating such requirement, or

[(B) violates or fails or refuses to comply with any order under section 119 or under subsection (a) or (d) of this section, or

[(C) violates section 111(e), section 112(c), or

[(D) violates any requirement of section 119(g) (as in effect before the date of the enactment of this Act, subsection (b)(7) or (d)(5) of section 120 (relating to noncompliance penalties), or any requirement of part B (relating to ozone),

shall be punished by a fine of not more than \$25,000 per day of violation, or by imprisonment for not more than one year, or by both. If the conviction is for a violation committed after the first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two years, or by both.

[(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six months, or by both.

[(3) For the purpose of this subsection, the term “person” includes, in addition to the entities referred to in section 302(e), any responsible corporate officer.

[(d)(1) A State (or, after thirty days notice to the State, the Administrator) may issue to any stationary source which is unable to comply with any requirement of an applicable implementation plan an order which specifies a date for final compliance with such requirement later than the date for attainment of any national ambient air quality standard specified in such plan if—

[(A) such order is issued after notice to the public (and, as appropriate, to the Administrator) containing the content of the proposed order and opportunity for public hearing;

[(B) the order contains a schedule and timetable for compliance;

[(C) the order requires compliance with applicable interim requirements as provided in paragraph (5)(B) (relating to sources converting to coal), and paragraphs (6) and (7) (relating to all sources receiving such orders) and requires the emission monitoring and reporting by the source authorized to be required under sections 110(a)(2)(F) and 114(a)(1);

[(D) the order provides for final compliance with the requirement of the applicable implementation plan as expeditiously as practicable, but (except as provided in paragraph (4) or (5)) in no event later than July 1, 1979, or three years after the date for final compliance with such requirement specified in such plan, whichever is later; and

[(E) in the case of a major stationary source, the order notifies the source that, unless exempted under section 120(a)(2) (B) or (C), it will be required to pay a noncompliance penalty effective July 1, 1979, as provided under section 120 or by such later date as is set forth in the order in accordance with section 120 (b)(3) or (g), in the event such source fails to achieve final compliance by July 1, 1979.

[(2) In the case of any major stationary source, no such order issued by the State shall take effect until the Administrator determines that such order has been issued in accordance with the requirements of this Act. The Administrator shall determine, not later than 90 days after receipt of notice of the issuance of an order under this subsection with respect to any major stationary source, whether or not any State order under this subsection is in accordance with the requirements of this Act. In the case of any source other than a major stationary source, such order issued by the State shall cease to be effective upon a determination by the Administrator that it was not issued in accordance with the requirements of this Act. If the Administrator so objects, he shall simultaneously proceed to issue an enforcement order in accordance with subsection (a) or an order under this subsection. Nothing in this section shall be construed as limiting the authority of a State or political subdivision to adopt and enforce a more stringent emission limitation or more expeditious schedule or timetable for compliance than that contained in an order by the Administrator.

[(3) If any source not in compliance with any requirement of an applicable implementation plan gives written notification to the State (or the Administrator) that such source intends to comply by means of replacement of the facility, a complete change in production process or a termination of operation, the State (or the Administrator) may issue an order under paragraph (1) of this subsection permitting the source to operate until July 1, 1979, without any interim schedule of compliance: Provided, That as a condition of the issuance of any such order, the owner or operator of such source shall post a bond or other surety in an amount equal to the cost of actual compliance by such facility and any economic value which may accrue to the owner or operator of such source by reason of the failure to comply. If a source for which the bond or other surety required by this paragraph has been posted fails to replace the facility, change the production process, or terminate the operations as specified in the order by the required date, the owner or operator shall immediately forfeit on the bond or other surety and the State (or the Administrator) shall have no discretion to modify the order under this paragraph or to compromise the bond or other surety.

[(4) An order under paragraph (1) of this subsection may be issued to an existing stationary source if—

[(A) the source will expeditiously use new means of emission limitation which the Administrator determines is likely to be adequately demonstrated (within the meaning of section 111(a)(1)) upon expiration of the order,

[(B) such new means of emission limitation is not likely to be used by such source unless an order is granted under this subsection,

[(C) such new means of emission limitation is determined by the Administrator to have a substantial likelihood of—

[(i) achieving greater continuous emission reduction than the means of emission limitation which, but for such order, would be required; or

[(ii) achieving an equivalent continuous reduction at lower cost in terms of energy, economic, or nonair quality environmental impact; and

[(D) compliance by the source with the requirement of the applicable implementation plan would be impracticable prior to, or during, the installation of such new means.

Such an order shall provide for final compliance with the requirement in the applicable implementation plan as expeditiously as practicable, but in no event later than five years after the date on which the source would otherwise be required to be in full compliance with the requirement.

[(5)(A) In the case of a major stationary source which is burning petroleum products or natural gas, or both and which—

[(i) is prohibited from doing so under an order pursuant to the provisions of section 2(a) of the Energy Supply and Environmental Coordination Act of 1974 or any amendment thereto, or any subsequent enactment which supersedes such provisions, or

[(ii) within one year after enactment of the Clean Air Act Amendments of 1977 gives notice of intent to convert to coal as its primary energy source because of actual or anticipated curtailment of natural gas supplies under any curtailment plan or schedule approved by the Federal Power Commission (or, in the case of intrastate natural gas supplies, approved by the appropriate State regulatory commission),

and which thereby would no longer be in compliance with any requirement under an applicable implementation plan, an order may be issued by the Administrator under paragraph (1) of this subsection for such source which specifies a date for final compliance with such requirement as expeditiously as practicable, but not later than December 31, 1980. The Administrator may issue an additional order under paragraph (1) of this subsection for such source providing an additional period for such source to come into compliance with the requirement in the applicable implementation plan, which shall be as expeditiously as practicable, but in no event later than five years after the date required for compliance under the preceding sentence.

[(B) In issuing an order pursuant to subparagraph (A), the Administrator shall prescribe (and may from time to time modify) emission limitations, requirements respecting pollution characteristics of coal, or other enforceable measures for control of emissions for each source to which such an order applies. Such limitations, requirements, and measures shall be those which the Administrator determines must be complied with by the source in order to assure (throughout the period before the date for final compliance established in the order) that the burning of coal by such source will not result in emissions which cause or contribute to concentrations of any air pollutant in excess of any national primary ambient air quality standard for such pollutant.

[(C) The Administrator may, by regulation, establish priorities under which manufacturers of continuous emission reduction systems necessary to carry out this paragraph shall provide such systems to users thereof, if he finds, after consultation with the States, that priorities must be imposed in order to assure that such systems are first provided to sources subject to orders under this paragraph in air quality control regions in which national primary ambient air quality standards have not been achieved. No regulation under this subparagraph may impair the obligation of any contract entered into before the date of enactment of the Clean Air Act Amendments of 1977.

[(D) No order issued to a source under this paragraph with respect to an air pollutant shall be effective if the national primary ambient air quality standard with respect to such pollutant is being exceeded at any time in the air quality control region in which such source is located. The preceding sentence shall not apply to a source if, upon submission by any person of evidence satisfactory to the Administrator, the Administrator determines (after notice and public hearing)—

[(i) that emissions of such air pollutant from such source will affect only infrequently the air quality concentrations of such pollutant in each portion of the region where such standard is being exceeded at any time;

[(ii) that emissions of such air pollutant from such source will have only insignificant effect on the air quality concentration of such pollutant in each portion of the region where such standard is being exceeded at any time; and

[(iii) with reasonable statistical assurance that emissions of such air pollutant from such source will not cause or contribute to air quality concentrations of such pollutant in excess of the national primary ambient air quality standard for such pollutant.

[(6) An order issued to a source under this subsection shall set forth compliance schedules containing increments of progress which require compliance with the requirement postponed as expeditiously as practicable.

[(7) A source to which an order is issued under paragraph (1), (3), (4), or (5) of this subsection shall use the best practicable system or systems of emission reduction (as determined by the Administrator taking into account the requirement with which the source must ultimately comply) for the period during which such order is in effect and shall comply with such interim requirements as the Administrator determines are reasonable and practicable. Such interim requirements shall include—

[(A) such measures as the Administrator determines are necessary to avoid an imminent and substantial endangerment to health of persons, and

[(B) a requirement that the source comply with the requirements of the applicable implementation plan during any such period insofar as such source is able to do so (as determined by the Administrator).

[(8) Any order under paragraph (1) of this subsection shall be terminated if the Administrator determines on the record, after notice and hearing, that the inability of the source to comply no longer exists. If the owner or operator of the source to which the order is issued demonstrates that prompt termination of such order would result in undue hardship, the termination shall become effective at the earliest practicable date on which such undue hardship would not result, but in no event later than the date required under this subsection.

[(9) If the Administrator determines that a source to which an order is issued under this subsection is in violation of any requirement of this subsection, he shall—

[(A) enforce such requirement under subsection (a), (b), or (c) of this section,

[(B) (after notice and opportunity for public hearing) revoke such order and enforce compliance with the requirement with respect to which such order was granted,

[(C) give notice of noncompliance and commence action under section 120, or

[(D) take any appropriate combination of such actions.

[(10) During the period of the order in effect under this subsection and where the owner or operator is in compliance with the terms of such order, no Federal enforcement action pursuant to this section and no action under section 304 of this Act shall be pursued against such owner or operator based upon noncompliance during the period the order is in effect with the requirement for the source covered by such order.

[(11) For the purposes of sections 110, 304, and 307 of this Act, any order issued by the State and in effect pursuant to this subsection shall become part of the applicable implementation plan.

[(12) Any enforcement order issued under subsection (a) of this section or any consent decree in an enforcement action which is in effect on the day of enactment of the Clean Air Act Amendments of 1977 shall remain in effect to the extent that such order or consent decree is (A) not inconsistent with the requirements of this subsection and section 119 or (B) the administrative orders on consent issued by the Administrator on November 5, 1975 and February 26, 1976 and requiring compliance with sulfur dioxide emission limitations or standards at least as stringent as those promulgated under section 111. Any such enforcement order issued under subsection (a) of this section or consent decree which provides for an extension beyond July 1, 1979, except

such administrative orders on consent, is void unless modified under this subsection within one year after the enactment of the Clean Air Act Amendments of 1977 to comply with the requirements of this subsection.

[(e)(1) The Administrator may, in his discretion, in the case of any person which is the owner or operator of a stationary source in an iron- and steel-producing operation not in compliance with the emission limitation requirements of an applicable implementation plan, consent to entry of a Federal judicial decree, or to the modification of an existing Federal judicial decree, with such person establishing a schedule for compliance for such source extending beyond December 31, 1982, but ending not later than December 31, 1985, on the following conditions:

[(A) the Administrator finds, on the basis of information submitted by the applicant and other information available to him, that such extension of compliance is necessary to allow such person to make capital investments in its iron- and steel-producing operations to improve their efficiency and productivity;

[(B) the Administrator finds, on the basis of information submitted by the applicant and other information available to him, that an amount equal to the funds the expenditure of which would have been required to comply by December 31, 1982, with those requirements of an applicable implementation plan for which such extensions of compliance are granted and whose expenditure for such purposes are being deferred until after December 31, 1982, pursuant to such extensions will be invested prior to two years from the date of enactment of this subsection in additional capital investments in the iron- and steel-producing operations owned or operated by such person, and located in communities which already contain iron- and steel-producing operations, to improve their efficiency and productivity;

[(C) the Administrator and such person consent to entry of Federal judicial decree(s) establishing a phased program of compliance to bring each stationary source at all of such person's iron- and steel-producing operations into compliance with the emission limitation requirements of applicable implementation plans (or, with respect to existing stationary sources located in any nonattainment area for which no implementation plan has been approved as meeting the requirements of part D and subject to implementation plan(s) which do not require compliance with emission limitations which represent at least reasonably available control technology, compliance with emission limitations which represent reasonably available control technology) as expeditiously as practicable but no later than December 31, 1982, or, in the case of sources for which extensions of compliance have been granted, no later than December 31, 1985; such decree(s) shall also contain, at a minimum, (i) requirements for interim controls (which may include operation and maintenance procedures); (ii) increments of compliance sufficient to assure compliance by the final compliance deadlines; (iii) requirement(s) that the amount referred to in subparagraph (B) above, is to be invested in projects representing additional capital investments in the iron- and steel-producing operations owned or operated by such person for the purposes specified in such subparagraph and shall contain schedule(s) specifying when each such project (or specified alternative project) is to be commenced and completed, as well as increments of progress toward completion; (iv) stipulated monetary penalties covering completion of the air pollution control projects required by the decree, the projects referred to under (iii) above, and such other items as appropriate; (v) monitoring requirements; (vi) reporting requirements (including provision for periodic reports to be filed with the court); and (vii) provisions for preventing increases of emissions from each stationary source;

[(D) the Administrator finds, on the basis of information submitted by the applicant and other information available to him, that such person will have sufficient funds to comply with all applicable requirements by the times set forth in the judicial decree(s) entered into pursuant to subparagraph (C) of this subsection;

[(E) the Administrator finds, on the basis of information submitted by the applicant and other information available to him, that the applicant is in compliance with existing Federal judicial decrees (if any) entered under section 113 of this Act applicable to its iron- and steel-producing operations or that any violations of such decrees are de minimus in nature; and

[(F) the Administrator finds, on the basis of information submitted by the applicant and other information available to him, that any extension of compliance granted pursuant to this subsection will not result in degradation of air quality during the term of the extension.

[(2) For the purpose of this subsection, "iron- and steel-producing operations" include production facilities for iron and steel, as well as associated processing, coke making and sintering facilities. For the purpose of this subsection, "phased program of compliance" means a program assuring, to the extent possible, that capital expenditures for achieving compliance at all sources owned or operated by such person in iron- and steel-producing operations must be made during the second and each succeeding year of the period covered by the decree(s) in an amount such that at the end of each such year the cumulative expenditures under the decree(s) will be at least equal to the amount which would have been spent if the total expenditures to be made under the decree(s) were made in equal increments during each year of the decree(s). For the purpose of this subsection, "additional capital investments in iron- and steel-producing operations" means investments which the Administrator finds would not be made during the same time period if extension(s) of time for compliance with clean air requirements were not granted under this subsection. The decree entered into pursuant to subparagraph (C) of paragraph (1) of this subsection shall specify the projects which represent additional capital investment in iron- and steel-producing operations, but may also contain specified alternative projects. The decree may also be modified to substitute equivalent projects for those specified. The owner or operator of iron- and steel-producing operations seeking an extension of compliance under this subsection has the burden of satisfying the Administrator with regard to the findings required in paragraphs (A), (B), (D), (E), and (F). A person which is subject to a judicial decree entered or modified pursuant to this subsection shall not be assessed a noncompliance penalty under section 120 of the Act for any source with an extension of compliance under such decree for the period of time covered by the decree only if such source remains in compliance with all provisions and requirements of such decree.

[(3) Any records, reports, or information obtained by the Administrator under this subsection shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (other than emission data) to which the Administrator has access under this section if made public, is likely to cause substantial harm to the person's competitive position, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code, except that such record, report, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act. Any regulations promulgated under section 114 of this Act apply with equal force to this subsection subject, however, to any changes that the Administrator shall determine are necessary. This paragraph does not constitute authority to withhold records, reports, or information from the Congress.

[(4) Nothing in this subsection shall preclude or deny the right of any State or political subdivision to enforce any air pollution requirements in any State judicial or administrative forum.

[(5) The provisions of this subsection shall be self-executing, and no implementing regulations shall be required.

[(6) Upon receipt of an application for an extension of time under this subsection with respect to any stationary source the Administrator shall promptly—

[(i) publish notice of such receipt in the Federal Register;

[(ii) notify the Governor of the State in which the stationary source is located; and

[(iii) notify the chief elected official of the political subdivision in which the source is located.

[(7)(A) The Administrator shall publish in the Federal Register notice of any finding made, or other action taken, by him in connection with the entry of any consent decree or modification of an existing consent decree pursuant to this subsection or in connection with the Administrator's failure or refusal to consent to such a decree.

[(B)(i) Except as provided in clause (ii), any finding or other action of the Administrator under this subsection with respect to any stationary source, and any failure or refusal of the Administrator to make any such finding or to take any such action under this subsection, shall be reviewable only by a court in which a civil action under section 113 of this Act is brought against the owner or operator of such stationary source.

[(ii) Where, before the date of the enactment of the Steel Industry Compliance Extension Act of 1981, a civil action was brought under this Act against the owner or operator of such stationary source, any finding or other action of the Administrator under this subsection with respect to such stationary source, and any failure or refusal of the Administrator to make any such finding or to take any such action under this subsection, shall be reviewable only by the court in which the civil action was brought.

[(8) The provisions of section 304(b)(1)(B) of this Act shall be applicable to this subsection.

[(9) For a source which receives an extension under this subsection, air pollution requirements specified in Federal judicial decrees entered into or modified under this subsection that involves such source may not be modified to extend beyond December 31, 1985.]

SEC. 113. FEDERAL ENFORCEMENT.

(a) In General.—

(1) Order to comply with sip requirements.—Whenever, on the basis of any information available to him, the Administrator finds that any person has violated or is in violation of any requirement of an applicable implementation plan, the Administrator shall notify the person and the State in which the plan applies of such finding. At any time after the expiration of 30 days following the date on which such notice of the violation is issued, the Administrator may, without regard to the period of violation (subject to section 2462 of title 28 of the United States Code)—

(A) issue an order requiring such person to comply with the requirements of such plan,

(B) issue an administrative penalty order in accordance with subsection (d), or

(C) bring a civil action in accordance with subsection (b).

(2) State failure to enforce sip or permit program.—Whenever, on the basis of information available to him, the Administrator finds that violations of an applicable implementation plan or an approved permit program under title IV are so widespread that such violations appear to result from a failure of the State in which the plan or permit program applies to enforce the plan or permit program effectively, he shall so notify the State. In the case of a permit program, the notice shall be made in accordance with title IV. If the Administrator finds such failure extends beyond the 30th day after such notice (90 days in the case of such permit program), he shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such plan or permit program (hereafter referred to in this section as “period of federally assumed enforcement”), the Administrator may enforce any requirement of such plan or permit program with respect to any person by—

(A) issuing an order requiring such person to comply with such requirement,

(B) issuing an administrative penalty order in accordance with subsection (d), or

(C) bringing a civil action in accordance with subsection (b).

(3) EPA enforcement of other requirements.—Except for a requirement enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to him, the Administrator finds that any person has violated, or is in violation of, any requirement of section 111(e) of this title (relating to new source performance standards), section 112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 402(a) or 403(c) of title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) (including a requirement of any rule, order, waiver, or permit promulgated or approved under any provision of such sections or titles and including any requirement for the payment of any fee owed to the United States under this Act), the Administrator may—

(A) issue an administrative penalty order in accordance with subsection (d),

(B) issue an order requiring such person to comply with such requirement,

(C) bring a civil action in accordance with subsection (b) or section 305, or

(D) request the Attorney General to commence a criminal action in accordance with subsection (c).

(4) Requirements for orders.—An order issued under this subsection (other than an order relating to a violation of section 112) shall not take effect until the person to whom it is issued has had an opportunity to confer with the Administrator concerning the alleged violation. A copy of any order issued under this subsection shall be sent to the State air pollution control agency of any State in which the violation occurs. Any order issued under this subsection shall state with reasonable specificity the nature of the violation, specify a time for compliance which the Administrator determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. In any case in which an order under this subsection (or notice to a violator under paragraph (1)) is issued to a corporation, a copy of such order (or notice) shall be issued to appropriate corporate officers. An order issued under this subsection shall require the person to whom it was issued to comply with the requirement as expeditiously as practicable, but in no event longer than one year after the date the order was issued, and shall be nonrenewable. No order issued under this subsection shall prevent the State or the Administrator from assessing any penalties nor otherwise affect or limit the State or the United States' authority to enforce under other provisions of this Act, nor affect any person's obligations to comply with any section of this Act or with a term or condition of any permit or applicable implementation plan promulgated or approved under this Act.

(5) Failure to comply with part c or part d of title i.—Whenever, on the basis of information available to him, the Administrator finds that a State is not acting in compliance with any requirement of part C or part D of title I, he may—

(A) issue an order prohibiting the construction or modification of any major stationary source in any area to which such requirement applies;

(B) issue an administrative penalty order in accordance with subsection (d), or

(C) bring a civil action under subsection (b)(5).

(b) Civil Judicial Enforcement.—The Administrator shall, as appropriate, in the case of any person which is the owner or operator of an affected source, a major emitting facility, or a major stationary source, and may, in the case of any other person, commence a civil action for a permanent or temporary injunction, or to assess and recover a civil penalty of not more than \$25,000 per day for each violation, or both, in any of the following instances:

(1) Whenever such person violates any requirement of an applicable implementation plan as provided in subsection (a). Such an action shall be commenced (A) during any period of federally assumed enforcement, or (B) more than 30 days following the date of the Administrator's notification under subsection (a)(1) that such person is violating such requirement.

(2) Whenever such person violates any requirement of section 111(e) of this title (relating to new source performance standards), section 112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) (including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under any such provision.

(3) Whenever such person attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) has been made.

Any action under this subsection may be brought in the district court of the United States in which the violation is alleged to have occurred or in which the defendant resides or has his principal place of business, and such court shall have jurisdiction to restrain such violation, to require compliance, to assess such civil penalty, to collect any fees owed the United States and any noncompliance assessment and nonpayment penalty owed under section 120 and to award any other appropriate relief. Notice of the commencement of such action shall be given to the appropriate State air pollution control agency. In the case of any action brought by the Administrator under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to the party or parties against whom such action was brought in any case where the court finds that such action was unreasonable.

(c) Criminal Penalties.—(1) Any person who knowingly violates any requirement of section 111(e) of this title (relating to new source performance standards), section 112(h) of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) of title IV (relating to permits), or any prohibition of title V (relating to acid deposition control), (including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under this Act) shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not to exceed 5 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

(2) Any person who knowingly—

(A) makes any false statement, representation, or certification in, or omits material information from or knowingly alters, conceals, or fails to maintain or file, any notice, application, record, report, plan, or other document filed or required to be filed, maintained, or used for purposes of compliance with this Act (whether with respect to the requirements imposed by the Administrator or by a State);

(B) fails to notify or report as required under this Act; or

(C) falsifies, tampers with, or renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under this Act

shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both.

(3) Any person who knowingly fails to pay any fee owed the United States under title I, III, IV, or V shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 1 year, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

(4) Any person who negligently releases into the ambient air any hazardous air pollutant listed pursuant to section 112 or any extremely hazardous substance listed pursuant to section 302(a)(2) of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11002(a)(2)) that is not listed in section 112, and who at the time negligently places another person in imminent danger of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 of the United States Code, or by imprisonment for not more than 1 year, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

(5)(A) Any person who knowingly releases into the ambient air any hazardous air pollutant listed pursuant to section 112 or any extremely hazardous substance listed pursuant to section 302(a)(2) of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11002(a)(2)) that is not listed in section 112, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 of the United States Code, or by imprisonment of not more than 15 years, or both. Any person committing such violation which is an organization shall, upon conviction under this paragraph, be subject to a fine of not more than \$1,000,000 for each violation. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment. For any air pollutant for which the Administrator has set an emissions standard or for any source for which a permit has been issued under title IV, a release of such pollutant in accordance with that standard or permit shall not constitute a violation of this paragraph or paragraph (4).

(B) In determining whether a defendant who is an individual knew that the violation placed another person in imminent danger of death or serious bodily injury—

(i) the defendant is responsible only for actual awareness or actual belief possessed; and

(ii) knowledge possessed by a person other than the defendant, but not by the defendant, may not be attributed to the defendant;

except that in proving a defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to be shielded from relevant information.

(C) It is an affirmative defense to a prosecution that the conduct charged was freely consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of—

(i) an occupation, a business, or a profession; or

(ii) medical treatment or medical or scientific experimentation conducted by professionally approved methods and such other person had been made aware of the risks involved prior to giving consent.

The defendant may establish an affirmative defense under this subparagraph by a preponderance of the evidence.

(D) The term “organization” means a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons.

(E) The term “serious bodily injury” means bodily injury which involves a substantial risk of death, unconsciousness, extreme physical pain, protracted and obvious disfigurement or protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

(6) For the purpose of this subsection, the term “person” includes, in addition to the entities referred to in section 302(e), any responsible corporate officer.

(d) Administrative Assessment of Civil Penalties.—(1) The Administrator may issue an administrative order against any person assessing a civil administrative penalty of up to \$25,000, per day of violation, whenever, on the basis of any available information, the Administrator finds that such person—

(A) violates any requirement of an applicable implementation plan (such order shall be issued (i) during any period of federally assumed enforcement, or (ii) more than thirty days following the date of the Administrator's notification under subsection (a)(1) of this section of a finding that such person is violating such requirement); or

(B) violates any other requirement of section 111(e) of this title (relating to new source performance standards) section 112 of this title (relating to standards for hazardous emissions), section 114 of this title (relating to inspections, etc.), section 165(a) of this title (relating to preconstruction requirements), an order under section 167 of this title (relating to preconstruction requirements), an order under section 303 of title III (relating to emergency orders), section 402(a) or 403(c) title IV (relating to permits), or any prohibition of title V (relating to acid deposition control) including a requirement of any rule, order, waiver, or permit promulgated or approved under such sections or titles, and including any requirement for the payment of any fee owed the United States under this Act; or

(C) attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) of this section has been made.

The Administrator's authority under this paragraph shall be limited to matters where the total penalty sought does not exceed \$200,000 and the first alleged date of violation occurred no more than 12 months prior to the initiation of the administrative action, except where the Administrator and the Attorney General jointly determine that a matter involving a larger penalty amount or longer period of violation is appropriate for administrative penalty action. Any such determination by the Administrator and the Attorney General shall not be subject to judicial review.

(2)(A) An administrative penalty assessed under paragraph (1) shall be assessed by the Administrator by an order made on the record after opportunity for a hearing in accordance with sections 554 and 556 of title 5 of the United States Code. The Administrator shall issue reasonable rules for discovery and other procedures for hearings under this paragraph. Before issuing such an order, the Administrator shall give written notice to the person to be assessed an administrative penalty of the Administrator's proposal to issue such order and provide such person an opportunity to request such a hearing on the order, within 30 days of the date the notice is received by such person.

(B) The Administrator may compromise, modify, or remit, with or without conditions, any administrative penalty which may be imposed under this subsection.

(3) The Administrator may implement, after consultation with the Attorney General and the States, a field citation program through regulations establishing appropriate minor violations for which field citations assessing civil penalties not to exceed \$5,000 per day of violation may be issued by officers or employees designated by the Administrator. Any person to whom a

field citation is assessed may, within a reasonable time as prescribed by the Administrator through regulation, elect to pay the penalty assessment or to request a hearing on the field citation. If a request for a hearing is not made within the time specified in the regulation, the penalty assessment in the field citation shall be final. Such hearing shall not be subject to section 554 or 556 of title 5 of the United States Code, but shall provide a reasonable opportunity to be heard and to present evidence. Payment of a civil penalty required by a field citation shall not be a defense to further enforcement by the United States or a State to correct a violation, or to assess the statutory maximum penalty pursuant to other authorities in the Act, if the violation continues.

(4) Any person against whom a civil penalty is assessed by the Administrator under this subsection may seek review of such assessment in the United States District Court for the District of Columbia or for the district in which the violation is alleged to have occurred, in which such person resides, or where such person's principal place of business is located, within 30 days following the date the civil penalty order is issued under paragraph (2), or the final decision in a hearing under paragraph (3) is rendered, and by simultaneously sending a copy of the filing by certified mail to the Administrator and the Attorney General. The Administrator or Attorney General, as appropriate, shall promptly file in such court a certified copy, or certified index, as appropriate, of the record on which the order or final decision was issued within 30 days. Such court, in the case of an assessment under paragraph (2), shall not set aside or remand such order or final decision unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Administrator's assessment of the penalty constitutes an abuse of discretion. In any such proceedings, the United States may seek to recover civil penalties assessed under this section.

(5) If any person fails to pay an assessment of a civil penalty—

(A) after the order making the assessment or field citation has become final, or

(B) after a court in an action brought under paragraph (4) has entered a final judgment in favor of the Administrator,

the Administrator shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed (plus interest at rates established pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986 from the date of the final order or decision or the date of the final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any person who fails to pay on a timely basis a civil penalty under this section shall be required to pay, in addition to such penalty and interest, the United States' enforcement expenses, including but not limited to attorneys fees and costs incurred by the United States for collection proceedings.

(e) **Penalty Assessment Criteria.**—(1) In determining the amount of any penalty to be assessed under this section or section 304(a), the Administrator or the court, as appropriate, shall take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

(2) A penalty may be assessed for each day of violation. For purposes of determining the number of days of violation for which a penalty may be assessed under this section or section 304(a), or an assessment may be made under section 120, the violation shall be deemed to commence on the first provable date of violation and to continue each and every day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by a preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

(f) **Rewards.**—The Administrator may pay a reward, not to exceed \$10,000, to any person who furnishes information or services which lead to a criminal conviction or a judicial or administrative civil penalty for any violation of titles I, III, IV, or V of this Act enforced under this section. Such payment is subject to available appropriations for such purposes as provided in annual appropriation Acts. Any officer, or employee of the United States or any State or local government who furnishes information

or renders service in the performance of an official duty is ineligible for payment under this subsection. The Administrator may, by regulation, prescribe additional criteria for eligibility for such a reward.

(g) Settlements; Public Participation.—At least 30 days before a consent order or settlement agreement of any kind under this Act (other than enforcement actions under section 113, 120, or title II, whether or not involving civil or criminal penalties, or judgments subject to Department of Justice policy on public participation) is final or filed with a court, the Administrator shall provide a reasonable opportunity by notice in the Federal Register to persons who are not named as parties or intervenors to the action or matter to comment in writing. The Administrator or the Attorney General, as appropriate, shall promptly consider any such written comments and may withdraw or withhold his consent to the proposed order or agreement if the comments disclose facts or considerations which indicate that is inappropriate, improper, inadequate, or inconsistent with the requirements of this Act. Nothing in this subsection shall apply to civil or criminal penalties under this Act.

inspections, monitoring, and entry

Sec. 114. (a) For the purpose (i) of developing or assisting in the development of any implementation plan under section 110 or 111(d), any standard of performance under section 111, or any emission standard under section 112 (ii) of determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out any provision of this Act (except a provision of title II with respect to a manufacturer of new motor vehicles or new motor vehicle engines)—

[(1) the Administrator may require any person who owns or operates any emission source or who is subject to any requirement of this Act (other than a manufacturer subject to the provisions of section 206(c) or 208) with respect to a provision of title II to (A) establish and maintain such records, (B) make such reports, (C) install, use, and maintain such monitoring equipment or methods, (D) sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (E) provide such other information, as he may reasonably require; and]

(1) the Administrator may require any person who owns or operates any emission source, who manufactures emission control equipment or process equipment, who the Administrator believes may have information necessary for the purposes set forth in this subsection, or who is subject to any requirement of this Act (other than a manufacturer subject to the provisions of section 206(c) or 208 with respect to a provision of title II) on a one-time, periodic or continuous basis to—

(A) establish and maintain such records;

(B) make such reports;

(C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods;

(D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods and in such manner as the Administrator shall prescribe);

(E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical;

(F) submit compliance certifications in accordance with section 114(a)(3); and

(G) provide such other information, as he may reasonably require; and

* * * * *

(3) The Administrator shall in the case of any person which is the owner or operator of a major stationary source, and may, in the case of any other person, require enhanced monitoring and submission of compliance certifications. Compliance certifications shall include (A) identification of the applicable requirement that is the basis of the certification, (B) the method used for determining the compliance status of the source, (C) the compliance status, (D) whether compliance is continuous or intermittent, (E) such other facts as the Administrator may require. Compliance certifications and monitoring data shall be public information. Nothing in this paragraph shall be construed as requiring disclosure of information subject to exemption from disclosure under subsection (c) of this section as trade secrets or that is subject to applicable law concerning self-incrimination. Submission of a compliance certification shall in no way limit the Administrator's authorities to investigate or otherwise implement this Act.

* * * * *

control of pollution from federal facilities

Sec. 118. (a) Each department, agency, and instrumentality of executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge of air pollutants, and each officer, agent, or employee thereof, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of air pollution, including fees that meet the requirements of title IV or any other reasonable service charges that are equally applicable to, and paid by, facilities owned or operated by State, regional, or local government entities, in the same manner, and to the same extent as any nongovernmental entity. The preceding sentence shall apply (A) to any requirement whether substantive or procedural (including any recordkeeping or reporting requirement, any requirement respecting permits and any other requirement whatsoever), (B) to the exercise of any Federal, State, or local administrative authority, and (C) to any process and sanction, whether enforced in Federal, State, or local courts or in any other manner. This subsection shall apply notwithstanding any immunity of such agencies, officers, agents, or employees under any law or rule of law. No officer, agent, or employee of the United States shall be personally liable for any civil penalty for which he is not otherwise liable.

* * * * *

noncompliance penalty

Sec. 120. (a)(1)***

(2)(A) Except as provided in subparagraph (B) or (C) of this paragraph, the State or the Administrator shall assess and collect a noncompliance penalty against every person who owns or operates—

(i)***

(ii) a stationary source which is not in compliance with an emission limitation, emission standard, standard of performance, or other requirement established under section 111, 167, 303, or 112 of this Act, or

(iii) a stationary source which is not in compliance with any requirement of title IV, V or VII of this Act, or

[(iii)] (iv) any source referred to in [clause (i) or (ii)] clause (i), (ii), or (iii) (for which an extension, order, or suspension referred to in subparagraph (B), or Federal or State consent decree is in effect), or a primary nonferrous smelter which has received a primary nonferrous smelter order under section 119 which is not in compliance with any interim emission control requirement or schedule of compliance under such extension, order, suspension, or consent decree.

* * * * *

consultation

Sec. 121. In carrying out the requirements of this Act requiring applicable implementation plans to contain—

(1)***

(2) any measure referred to—

(A) in part D (pertaining to nonattainment requirements), or

(B) in part C (pertaining to prevention of significant deterioration),

and in carrying out the requirements of section 113(d) (relating to certain enforcement orders), the State shall provide a satisfactory process of consultation with general purpose local governments, designated organizations of elected officials of local governments and any Federal land manager having authority over Federal land to which the State plan applies, effective with respect to any such requirement which is adopted more than one year after the date of enactment of the Clean Air Act Amendments of 1977 as part of such plan. Such process shall be in accordance with regulations promulgated by the Administrator to assure adequate consultation. [Such regulations shall be promulgated after notice and opportunity for public hearing and not later than 6 months after the date of enactment of the Clean Air Act Amendments of 1977.] The Administrator shall update as necessary the original regulations required and promulgated under this section (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to ensure adequate consultation. Only a general purpose unit of local government, regional agency, or council of governments adversely affected by action of the Administrator approving any portion of a plan referred to in this subsection may petition for judicial review of such action on the basis of a violation of the requirements of this section.

* * * * *

interstate pollution abatement

Sec. 126. (a)***

(b) Any State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section [110(a)(2)(E)(i)] 110(a)(2)(D)(ii) or this section. Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition.

(c) Notwithstanding any permit which may have been granted by the State in which the source is located (or intends to locate), it shall be a violation of this section and the applicable implementation plan in such State—

(1) for any major proposed new (or modified) source with respect to which a finding has been made under subsection (b) to be constructed or to operate in violation of the prohibition of section [110(a)(2)(E)(i)] 110(a)(2)(D)(ii) or this section, or

(2) for any major existing source to operate more than three months after such finding has been made with respect to it.

The Administrator may permit the continued operation of a source referred to in paragraph (2) beyond the expiration of such three-month period if such source complies with such emission limitations and compliance schedules (containing increments of progress) as may be provided by the Administrator to bring about compliance with the requirements contained in section [110(a)(2)(E)(i)] 110(a)(2)(D)(ii) or this section as expeditiously as practicable, but in no case later than three years after the date of such finding. Nothing in the preceding sentence shall be construed to preclude any such source from being eligible for

an enforcement order under section 113(d) after the expiration of such period during which the Administrator has permitted continuous operation.

* * * * *

SEC. 129. INFORMATION FOR SMALL SOURCES.

(a) In General.—The Administrator shall develop, collect, evaluate, and coordinate information on compliance methods and technologies for small sources. The Administrator shall maintain a central reference library of such information, and shall disseminate such information to States or other persons seeking to comply with this Act.

(b) Education Programs for Small Sources.—The Administrator shall, in cooperation with the States and their small source technical assistance programs created pursuant to section 110(a)(2)(N), develop programs for educating small sources about their obligations under this Act and means to comply.

SEC. 130. EMISSION FACTORS.

Within 6 months after enactment of the Clean Air Act Amendments of 1990, and at least every 3 years thereafter, the Administrator shall review and, if necessary, revise, the methods (“emission factors”) used for purposes of this Act to estimate the quantity of emissions of carbon monoxide, volatile organic compounds, and oxides of nitrogen from sources of such air pollutants (including area sources and mobile sources). In addition, the Administrator shall establish emission factors for sources for which no such methods have previously been established by the Administrator. The Administrator shall permit any person to demonstrate improved emissions estimating techniques, and following approval of such techniques, the Administrator shall authorize the use of such techniques. Any such technique may be approved only after appropriate public participation. Until the Administrator has completed the revision required by this section, nothing in this section shall be construed to affect the validity of emission factors established by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990.

SEC. 131. LAND USE AUTHORITY.

Nothing in this Act constitutes an infringement on the existing authority of counties and cities to plan or control land use, and nothing in this Act provides or transfers authority over such land use.

* * * * *

Part C—Prevention of Significant Deterioration of Air Quality

subpart 1

* * * * *

plan requirements

Sec. 161. In accordance with the policy of section 101(b)(1), each applicable implementation plan shall contain emission limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) [identified pursuant to section 107(d)(1) (D) or (E)] designated pursuant to section 107 as attainment or unclassifiable.

initial classifications

Sec. 162. (a) Upon the enactment of this part, all—

- (1) international parks,
- (2) national wilderness areas which exceed 5,000 acres in size,
- (3) national memorial parks which exceed 5,000 acres in size, and
- (4) national parks which exceed six thousand acres in size,

and which are in existence on the date of enactment of the Clean Air Act Amendments of 1977 shall be class I areas and may not be redesignated. All areas which were redesignated as class I under regulations promulgated before such date of enactment shall be class I areas which may be redesignated as provided in this part. The extent of the areas designated as Class I under this section shall conform to any changes in the boundaries of such areas which have occurred subsequent to the date of the enactment of the Clean Air Act Amendments of 1977, or which may occur subsequent to the date of the enactment of the Clean Air Act Amendments of 1990.

(b) All areas in such State [identified pursuant to section 107(d)(1) (D) or (E)] designated pursuant to section 107(d) as attainment or unclassifiable which are not established as class I under subsection (a) shall be class II areas unless redesignated under section 164.

* * * * *

area redesignation

Sec. 164. (a) Except as otherwise provided under subsection (c), a State may redesignate such areas as it deems appropriate as class I areas. The following areas may be redesignated only as class I or II:

(1)***

* * * * *

The extent of the areas referred to in paragraph (1) and (2) shall conform to any changes in the boundaries of such areas which have occurred subsequent to the date of the enactment of the Clean Air Act Amendments of 1977, or which may occur subsequent to the date of the enactment of the Clean Air Act Amendments of 1990. Any area (other than an area referred to in paragraph (1) or (2) or an area established as class I under the first sentence of section 162(a)) may be redesignated by the State as class III if—

* * * * *

other pollutants

Sec. 166. (a)***

* * * * *

(f) PM-10 Increments.—The Administrator is authorized to substitute, for the maximum allowable increases in particulate matter specified in section 163(b) and section 165(d)(2)(C)(iv), maximum allowable increases in particulate matter with an aerodynamic diameter smaller than or equal to 10 micrometers. Such substituted maximum allowable increases shall be of equal stringency in effect as those specified in the provisions for which they are substituted. Until the Administrator promulgates regulations under the authority of this subsection, the current maximum allowable increases in concentrations of particulate matter shall remain in effect.

enforcement

Sec. 167. The Administrator shall, and a State may, take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent [the construction of a major emitting facility] the construction or modification of a major emitting facility which does not conform to the requirements of this part, or which is proposed to be constructed in any area [included in the list promulgated pursuant to paragraph (1) (D) or (E) of subsection (d) of section 107 of this Act] designated pursuant to section 107(d) as attainment or unclassifiable and which is not subject to an implementation plan which meets the requirements of this part.

* * * * *

Part D—Plan Requirements for Nonattainment Areas

SUBPART 1—NONATTAINMENT AREAS IN GENERAL

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

definitions

Sec. 171. For the purpose of this part [and section 110(a)(2)(I)]—

[(1) The term “reasonable further progress” means annual incremental reductions in emissions of the applicable air pollutant (including substantial reductions in the early years following approval or promulgation of plan provisions under this part and section 110(a)(2)(I) and regular reductions thereafter) which are sufficient in the judgment of the Administrator, to provide for attainment of the applicable national ambient air quality standard by the date required in section 172(a).

[(2) The term “nonattainment area” means, for any air pollutant an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator to be reliable) to exceed any national ambient air quality standard for such pollutant. Such term includes any area identified under subparagraphs (A) through (C) of section 107(d)(1).]

(1) Reasonable further progress.—The term “reasonable further progress” means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date.

(2) Nonattainment area.—The term “nonattainment area” means, for any air pollutant, an area which is designated “nonattainment” with respect to that pollutant within the meaning of section 107(d).

* * * * *

[nonattainment plan provisions]

[Sec. 172. (a)(1) The provisions of an applicable implementation plan for a State relating to attainment and maintenance of national ambient air quality standards in any nonattainment area which are required by section 110(a)(2)(I) as precondition for the construction or modification of any major stationary source in any such area on or after July 1, 1979, shall provide for attainment of each such national ambient air quality standard in each such area as expeditiously as practicable, but, in the case of national primary ambient air quality standards, not later than December 31, 1985.

[(2) In the case of the national primary ambient air quality standard for photochemical oxidants or carbon monoxide (or both) if the State demonstrates to the satisfaction of the Administrator (on or before the time required for submission of such

plan) that such attainment is not possible in an area with respect to either or both of such pollutants within the period prior to December 31, 1982, despite the implementation of all reasonably available measures, such provisions shall provide for the attainment of the national primary standard for the pollutant (or pollutants) with respect to which such demonstration is made, as expeditiously as practicable but not later than December 31, 1987.

[(b) The plan provisions required by subsection (a) shall—

[(1) be adopted by the State (or promulgated by the Administrator under section 110(c)) after reasonable notice and public hearing;

[(2) provide for the implementation of all reasonably available control measures as expeditiously as practicable;

[(3) require, in the interim, reasonable further progress (as defined in section 171(1)) including such reduction in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology;

[(4) include a comprehensive, accurate, current inventory of actual emissions from all sources (as provided by rule of the Administrator) of each such pollutant for each such area which is revised and resubmitted as frequently as may be necessary to assure that the requirements of paragraph (3) are met and to assess the need for additional reductions to assure attainment of each standard by the date required under subsection (a);

[(5) expressly identify and quantify the emissions, if any, of any such pollutant which will be allowed to result from the construction and operation of major new or modified stationary sources for each such area;

[(6) require permits for the construction and operation of new or modified major stationary sources in accordance with section 173 (relating to permit requirements);

[(7) identify and commit the financial and manpower resources necessary to carry out the plan provisions required by this subsection;

[(8) contain emission limitations, schedules of compliance and such other measures as may be necessary to meet the requirements of this section;

[(9) evidence public, local government, and State legislative involvement and consultation in accordance with section 174 (relating to planning procedures) and include (A) an identification and analysis of the air quality, health, welfare, economic, energy, and social effects of the plan provisions required by this subsection and of the alternatives considered by the State, and (B) a summary of the public comment on such analysis;

[(10) include written evidence that the State, the general purpose local government or governments, or a regional agency designated by general purpose local governments for such purpose, have adopted by statute, regulation, ordinance, or other legally enforceable document, the necessary requirements and schedules and timetables for compliance, and are committed to implement and enforce the appropriate elements of the plan;

[(11) in the case of plans which make a demonstration pursuant to paragraph (2) of subsection (a)—

[(A) establish a program which requires, prior to issuance of any permit for construction or modification of a major emitting facility, an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification;

[(B) establish a specific schedule for implementation of a vehicle emission control inspection and maintenance program; and

[(C) identify other measures necessary to provide for attainment of the applicable national ambient air quality standard not later than December 31, 1987.

[(c) In the case of a State plan revision required under the Clean Air Act Amendments of 1977 to be submitted before July 1, 1982, by reason of a demonstration under subsection (a)(2), effective on such date such plan shall contain enforceable measures to assure attainment of the applicable standard not later than December 31, 1987.]

SEC. 172. NONATTAINMENT PLAN PROVISIONS IN GENERAL.

(a) Classifications and Attainment Dates.—

(1) Classifications.—(A) On or after the date the Administrator promulgates the designation of an area as a nonattainment area pursuant to section 107(d) with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on the date of the enactment of the Clean Air Act Amendments of 1990), the Administrator may classify the area for the purpose of applying an attainment date pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, the Administrator may consider such factors as the severity of nonattainment in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

(B) The Administrator shall publish a notice in the Federal Register announcing each classification under subparagraph (A), except the Administrator shall provide an opportunity for at least 30 days for written comment. Such classification shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (concerning notice and comment) and shall not be subject to judicial review until the Administrator takes final action under subsection (k) or (l) of section 110 (concerning action on plan submissions) or section 179 (concerning sanctions) with respect to any plan submissions required by virtue of such designation.

(C) This paragraph shall not apply with respect to nonattainment areas for which classifications are specifically provided under other provisions of this part.

(2) Attainment dates for nonattainment areas.—(A) The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 107(d), except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

(B) The attainment date for an area designated nonattainment with respect to a secondary national ambient air quality standard shall be as expeditiously as practicable after the date such area was designated nonattainment under section 107(d).

(C) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the attainment date determined by the Administrator under subparagraph (A) or (B) if—

(i) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(ii) in accordance with guidance published by the Administrator, no more than a minimal number of exceedances of the relevant national ambient air quality standard has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this subparagraph for a single nonattainment area.

(D) This paragraph shall not apply with respect to nonattainment areas for which attainment dates are specifically provided under other provisions of this part.

(b) Schedule for Plan Submissions.—At the time the Administrator promulgates the designation of an area as nonattainment with respect to a national ambient air quality standard under section 107(d), the Administrator shall establish a schedule according to which the State containing such area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2). Such schedule must, at a minimum, include a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2).

(c) Nonattainment Plan Provisions.—The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

(1) In general.—Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

(2) RFP.—Such plan provisions shall require reasonable further progress.

(3) Inventory.—Such plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure that the requirements of this part are met.

(4) Identification and quantification.—Such plan provisions shall expressly identify and quantify the emissions, if any, of any such pollutant or pollutants which will be allowed, in accordance with section 173(a)(1)(B), from the construction and operation of major new or modified stationary sources in each such area. The plan shall demonstrate to the satisfaction of the Administrator that the emissions quantified for this purpose will be consistent with the achievement of reasonable further progress and will not interfere with attainment of the applicable national ambient air quality standard by the applicable attainment date.

(5) Permits for new and modified major stationary sources.—Such plan provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with section 173.

(6) Other measures.—Such plan provisions shall include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part.

(7) Compliance with section 110(a)(2).—Such plan provisions shall also meet the applicable provisions of section 110(a)(2).

(8) Equivalent techniques.—Upon application by any State, the Administrator may allow the use of equivalent modeling, emission inventory, and planning procedures, unless the Administrator determines that the proposed techniques are, in the aggregate, less effective than the methods specified by the Administrator.

(9) Contingency measures.—Such plan shall provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date applicable under this part. Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.

(d) Plan Revisions Required in Response to Finding of Plan Inadequacy.—Any plan revision for a nonattainment area which is required to be submitted in response to a finding by the Administrator pursuant to section 110(k)(5) (relating to calls for plan revisions) must correct the plan deficiency (or deficiencies) specified by the Administrator and meet all other applicable plan requirements of section 110 and this part. The Administrator may reasonably adjust the dates otherwise applicable under such requirements to such revision (except for attainment dates that have not yet elapsed), to the extent necessary to achieve a consistent application of such requirements. In order to facilitate submittal by the States of adequate and approvable plans consistent with the applicable requirements of this Act, the Administrator shall, as appropriate and from time to time, issue written guidelines, interpretations, and information to the States which shall be available to the public, taking into consideration any such guidelines, interpretations, or information provided before the date of the enactment of the Clean Air Act Amendments of 1990.

(e) Future Modification of Standard.—If the Administrator relaxes a national primary ambient air quality standard after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, within 12 months after the relaxation, promulgate requirements applicable to all areas which have not attained that standard as of the date of such relaxation. Such requirements shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.

[permit requirements]

SEC. 173. PERMIT REQUIREMENTS.

[Sec. 173.] (a) 4In General.—The permit program required by section 172(b)(6) shall provide that permits to construct and operate may be issued if—

(1) in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 110 and this part, the permitting agency determines that—

(A) by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the region, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources [allowed under the applicable implementation plan] (as determined in accordance with the regulations under this paragraph) prior to the application for such permit to construct or modify so as to represent (when considered together with the plan provisions required under section 172) reasonable further progress (as defined in section 171); or

(B) in the case of a new or modified major stationary source which is located in a zone (within the nonattainment area) identified by the Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, that emissions of such pollutant resulting from the proposed new or modified major stationary source will not cause or contribute to emissions levels which exceed the allowance permitted for such pollutant for such area from new or modified major stationary sources under section 172[(b)](c);

* * * * *

(4) the Administrator has not determined that the applicable implementation plan is [being carried out] not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements of this part[.]; and

(5) an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Any emission reductions required as a precondition of the issuance of a permit under paragraph [(1)(A) shall be legally binding] (1) shall be federally enforceable before such permit may be issued.

(b) Prohibition on Use of Old Growth Allowances.—Any growth allowance included in an applicable implementation plan to meet the requirements of section 172(b)(5) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) shall not be valid for use in any area that received or receives a notice under section 110(a)(2)(H)(ii) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) or under section 110(k) (1) that its applicable implementation plan containing such allowance is substantially inadequate.

(c) Offsets.—(1) The owner or operator of a new or modified major stationary source may comply with any offset requirement in effect under this part for increased emissions of any air pollutant only by obtaining emission reductions of such air pollutant from the same source or other sources in the same nonattainment area, except that the State may allow the owner or operator of a source to obtain such emission reductions in another nonattainment area if (A) the other area has an equal or higher nonattainment classification than the area in which the source is located and (B) emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located. Such emission reductions shall be, by the time a new or modified source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the area.

(2) Emission reductions otherwise required by this Act shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise required by this Act shall be creditable as emission reductions for such purposes if such emission reductions meet the requirements of paragraph (1).

(d) Control Technology Information.—The State shall provide that control technology information from permits issued under this section will be promptly submitted to the Administrator for purposes of making such information available through the RACT/BACT/LAER clearinghouse to other States and to the general public.

[planning procedures

[Sec. 174. (a) Within six months after the enactment of the Clean Air Act Amendments of 1977, for each region in which the national primary ambient air quality standard for carbon monoxide or photochemical oxidants will not be attained by July 1, 1979, the State and elected officials of affected local governments shall jointly determine which elements of a revised implementation plan will be planned for and implemented or enforced by the State and which such elements will be planned for and implemented or enforced by local governments or regional agencies, or any combination of local governments, regional agencies, or the State. Where possible within the time required under this subsection, the implementation plan required by this part shall be prepared by an organization of elected officials of local governments designated by agreement of the local governments in an affected area, and certified by the State for this purpose. Where such an organization has not been designated by agreement within six months after the enactment of the Clean Air Act Amendments of 1977, the Governor (or,

in the case of an interstate area, Governors), after consultation with elected officials of local governments, and in accordance with the determination under the first sentence of this subparagraph, shall designate an organization of elected officials of local governments in the affected area or a State agency to prepare such plan. Where feasible, such organization shall be the metropolitan planning organization designated to conduct the continuing, cooperative and comprehensive transportation planning process for the area under section 134 of title 23, United States Code or the organization responsible for the air quality maintenance planning process under regulations implementing this section, or the organization with both responsibilities.

[(b) The preparation of implementation plan provisions under this part shall be coordinated with the continuing, cooperative, and comprehensive transportation planning process required under section 134 of title 23, United States Code and the air quality maintenance planning process required under section 110, and such planning processes shall take into account the requirements of this part.]

SEC. 174. PLANNING PROCEDURES.

(a) In General.—For any ozone or carbon monoxide nonattainment area, the State containing such area and elected officials of affected local governments shall, before the date required for submittal of the inventory described under sections 182(a)(1) and 187(a)(1), jointly review and update as necessary the planning procedures adopted pursuant to this subsection as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, or develop new planning procedures pursuant to this subsection, as appropriate. In preparing such procedures the State and local elected officials shall determine which elements of a revised implementation plan will be developed, adopted, and implemented (through means including enforcement) by the State and which by local governments or regional agencies, or any combination of local governments, regional agencies, or the State. The implementation plan required by this part shall be prepared by an organization certified by the State, in consultation with elected officials of local governments and in accordance with the determination under the second sentence of this subsection. Such organization shall include elected officials of local governments in the affected area, and representatives of the State air quality planning agency, the State transportation planning agency, the metropolitan planning organization designated to conduct the continuing, cooperative and comprehensive transportation planning process for the area under section 134 of title 23, United States Code, the organization responsible for the air quality maintenance planning process under regulations implementing this Act, and any other organization with responsibilities for developing, submitting, or implementing the plan required by this part. Such organization may be one that carried out these functions before the date of the enactment of the Clean Air Act Amendments of 1990.

(b) Coordination.—The preparation of implementation plan provisions and subsequent plan revisions under the continuing transportation-air quality planning process described in section 108(e) shall be coordinated with the continuing, cooperative and comprehensive transportation planning process required under section 134 of title 23, United States Code, and such planning processes shall take into account the requirements of this part.

(c) Joint Planning.—In the case of a nonattainment area that is included within more than one State, the affected States may jointly, through interstate compact or otherwise, undertake and implement all or part of the planning procedures described in this section.

* * * * *

SEC. 175A. MAINTENANCE PLANS.

(a) Plan Revision.—Each State which submits a request under section 107(d) for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision of the applicable State implementation plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

(b) Subsequent Plan Revisions.—8 years after redesignation of any area as an attainment area under section 107(d), the State shall submit to the Administrator an additional revision of the applicable State implementation plan for maintaining the national primary ambient air quality standard for 10 years after the expiration of the 10-year period referred to in subsection (a).

(c) Nonattainment Requirements Applicable Pending Plan Approval.—Until such plan revision is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part shall continue in force and effect with respect to such area.

(d) Contingency Provisions.—Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the Administrator, in the Administrator's discretion, requires the State to submit a revised State implementation plan.

limitations on certain federal assistance

Sec. 176. [(a) The Administrator shall not approve any projects or award any grants authorized by this Act and the Secretary of Transportation shall not approve any projects or award any grants under title 23, United States Code, other than for safety, mass transit, or transportation improvement projects related to air quality improvement or maintenance, in any air quality control region—

[(1) in which any national primary ambient air quality standard has not been attained,

[(2) where transportation control measures are necessary for the attainment of such standard, and

[(3) where the Administrator finds after July 1, 1979, that the Governor has not submitted an implementation plan which considers each of the elements required by section 172 or that reasonable efforts toward submitting such an implementation plan are not being made (or, after July 1, 1982, in the case of an implementation plan revision required under section 172 to be submitted before July 1, 1982).

[(b) In any area in which the State or, as the case may be, the general purpose local government or governments or any regional agency designated by such general purpose local governments for such purpose, is not implementing any requirement of an approved or promulgated plan under section 110, including any requirement for a revised implementation plan under this part, the Administrator shall not make any grants under this Act.]

(c)(1) No department, agency, or instrumentality of the Federal Government shall [(1)] engage in, [(2)] support in any way or provide financial assistance for, [(3)] license or permit, or [(4)] approve, any activity which does not conform to a plan after it has been approved or promulgated under section 110. No metropolitan planning organization designated under section 134 of title 23, United States Code, shall give its approval to any project, program, or plan which does not conform to a plan approved or promulgated under section 110. The assurance of conformity to such a plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to a plan means—

(A) conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not, considering any growth likely to result from such activities—

(i) cause or contribute to a failure to attain any standard in any area; or

(ii) delay timely attainment of any standard or any required interim emission reductions.

(2) No later than one year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator, in consultation with the Secretary of Transportation, shall promulgate criteria and procedures for determining conformity and for keeping the Secretary of Transportation and the Administrator informed about such projects. Such procedures shall include a requirement that each State containing an ozone or carbon monoxide nonattainment area shall submit to the Administrator and the Secretary of Transportation, within 18 months after such date of enactment, a revision to its implementation plan that includes, for each such nonattainment area, criteria and procedures for assessing the conformity of any plan, program or project subject to the conformity requirements of this subsection.

* * * * *

SEC. 176A. INTERSTATE TRANSPORT COMMISSIONS.

(a) Authority To Establish Interstate Transport Regions.—Whenever, on the Administrator's own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. The Administrator, on the Administrator's own motion or upon petition from the Governor of any State, or upon the recommendation of a transport commission established under subsection (b), may—

(1) add any State or portion of a State to any region established under this subsection whenever the Administrator has reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region, or

(2) remove any State or portion of a State from the region whenever the Administrator has reason to believe that the control of emissions in that State or portion of the State pursuant to this section will not significantly contribute to the attainment of the standard in any area in the region.

The Administrator shall approve or disapprove any such petition or recommendation within 18 months of its receipt. The Administrator shall establish appropriate proceedings for public participation regarding such petitions and motions, including notice and comment.

(b) Transport Commissions.—

(1) Establishment.—Whenever the Administrator establishes a transport region under subsection (a), the Administrator shall establish a transport commission comprised of (at a minimum) each of the following members:

(A) The Governor of each State in the region or the designee of each such Governor.

(B) The Administrator or the Administrator's designee.

(C) The Regional Administrator (or the Administrator's designee) for each Regional Office for each Environmental Protection Agency Region affected by the transport region concerned.

(D) An air pollution control official representing each State in the region, appointed by the Governor.

Decisions of, and recommendations and requests to, the Administrator by each transport commission may be made only by a majority vote of all members other than the Administrator and the Regional Administrators (or designees thereof).

(2) Recommendations.—The transport commission shall assess the degree of interstate transport of the pollutant or precursors to the pollutant throughout the transport region, assess strategies for mitigating the interstate pollution, and recommend to the Administrator such measures as the Commission determines to be necessary to ensure that the plans for the relevant States meet the requirements of section 110(a)(2)(D). Such commission shall not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.).

(c) Commission Requests.—A transport commission established under subsection (b) may request the Administrator to issue a finding under section 110(k)(5) that the implementation plan for one or more of the States in the transport region is substantially inadequate to meet the requirements of section 110(a)(2)(D). The Administrator shall approve, disapprove, or partially approve and partially disapprove such a request within 18 months of its receipt and, to the extent the Administrator approves such request, issue the finding under section 110(k)(5) at the time of such approval. In acting on such request, the Administrator shall provide an opportunity for public participation and shall address each specific recommendation made by the commission. Approval or disapproval of such a request shall constitute final agency action within the meaning of section 307(b).

* * * * *

SEC. 179. SANCTIONS AND CONSEQUENCES OF FAILURE TO ATTAIN.

(a) State Failure.—For any implementation plan or plan revision required under this part (or required in response to a finding of substantial inadequacy as described in section 110(k)(5)), if the Administrator—

(1) finds that a State has failed, for an area designated nonattainment under section 107(d), to submit a plan, or to submit 1 or more of the elements (as determined by the Administrator) required by the provisions of this Act applicable to such an area, or has failed to make a submission for such an area that satisfies the minimum criteria established in relation to any such element under section 110(k),

(2) disapproves a submission under section 110(k), for an area designated nonattainment under section 107, based on the submission's failure to meet one or more of the elements required by the provisions of this Act applicable to such an area,

(3)(A) determines that a State has failed to make any submission as may be required under this Act, other than one described under paragraph (1) or (2), including an adequate maintenance plan, or has failed to make any submission, as may be required under this Act, other than one described under paragraph (1) or (2), that satisfies the minimum criteria established in relation to such submission under section 110(k)(1)(A), or

(B) disapproves in whole or in part a submission described under subparagraph (A), or

(4) finds that any requirement of an approved plan (or approved part of a plan) is not being implemented,

unless such deficiency has been corrected within 18 months after the finding, disapproval, or determination referred to in paragraph (1), (2), (3), and (4), one of the sanctions referred to in subsection (b) shall apply, as selected by the Administrator, until the Administrator determines that the State has come into compliance, except that if the Administrator finds a lack of good faith, both of such sanctions shall apply until the Administrator determines that the State has come into compliance. If the Administrator has selected one of such sanctions and the deficiency has not been corrected within 6 months thereafter, both of such sanctions shall apply until the Administrator determines that the State has come into compliance. In addition to

any other sanction applicable as provided in this section, the Administrator may withhold all or part of the grants for support of air pollution planning and control programs that the Administrator may award under section 105.

(b) Sanctions.—The sanctions referred to in subsection (a) are as follows:

(1) Highway funds.—The Secretary of Transportation shall not approve any project or award any grant under title 23, United States Code, other than for safety or mass transit.

(2) Offsets.—In applying the emissions offset requirements of section 173 to new or modified sources or emissions units for which a permit is required under part D, the ratio of emission reductions to increased emissions shall be at least 2 to 1.

(c) Notice of Failure To Attain.—(1) As expeditiously as practicable after the applicable attainment date for any nonattainment area, but not later than 6 months after such date, the Administrator shall determine, based on the area's air quality as of the attainment date, whether the area attained the standard by that date.

(2) Upon making the determination under paragraph (1), the Administrator shall publish a notice in the Federal Register containing such determination and identifying each area that the Administrator has determined to have failed to attain. The Administrator may revise or supplement such determination at any time based on more complete information or analysis concerning the area's air quality as of the attainment date.

(d) Consequences for Failure To Attain.—(1) Within 1 year after the Administrator publishes the notice under subsection (c) (2) (relating to notice of failure to attain), each State containing a nonattainment area shall submit a revision to the applicable implementation plan meeting the requirements of paragraph (2) of this subsection.

(2) The revision required under paragraph (1) shall meet the requirements of section 110 and section 172. In addition, the revision shall include such additional measures as the Administrator may reasonably prescribe, including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality-related health and environmental impacts.

(3) The attainment date applicable to the revision required under paragraph (1) shall be the same as provided in the provisions of section 172(a)(2), except that in applying such provisions the phrase “from the date of the notice under section 179(c)(2)” shall be substituted for the phrase “from the date such area was designated nonattainment under section 107(d)” and for the phrase “from the date of designation as nonattainment”.

SUBPART 2—ADDITIONAL PROVISIONS FOR OZONE NONATTAINMENT AREAS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 181. CLASSIFICATIONS AND ATTAINMENT DATES.

(a) Classification and Attainment Dates for 1989 Nonattainment Areas.—(1) Each area designated nonattainment for ozone pursuant to section 107(d) shall be classified at the time of such designation, under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the date of the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for ozone shall be as expeditiously as practicable but not later than the date provided in table 1.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(2) Notwithstanding table 1, in the case of a severe area with a 1988 ozone design value between 0.190 and 0.280 ppm, the attainment date shall be 17 years (in lieu of 15 years) after the date of the enactment of the Clean Air Amendments of 1990.

(3) At the time of publication of the notice under section 107(d)(4) (relating to area designations) for each ozone nonattainment area, the Administrator shall publish a notice announcing the classification of such ozone nonattainment area. The provisions of section 172(a)(1)(B) (relating to lack of notice and comment and judicial review) shall apply to such classification.

(4) If an area classified under paragraph (1) (Table 1) would have been classified in another category if the design value in the area were 5 percent greater or 5 percent less than the level on which such classification was based, the Administrator may, in the Administrator's discretion, within 90 days after the initial classification, by the procedure required under paragraph (3), adjust the classification to place the area in such other category. In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for ozone in the area, the level of pollution transport between the area and other affected areas, including both intrastate and interstate transport, and the mix of sources and air pollutants in the area.

(5) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the date specified in Table 1 of subsection (a) if—

(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

(b) New Designations and Reclassifications.—

(1) New designations to nonattainment.—Any area that is designated attainment or unclassifiable for ozone under section 107(d)(4), and that is subsequently redesignated to nonattainment for ozone under section 107(d)(3), shall, at the time of the redesignation, be classified by operation of law in accordance with Table 1 under subsection (a). Upon its classification, the area shall be subject to the same requirements under section 110, subpart 1 of this part, and this subpart that would have applied had the area been so classified at the time of the notice under subsection (a)(3), except that any absolute, fixed date applicable in connection with any such requirement is extended by operation of law by a period equal to the length of time between the date of the enactment of the Clean Air Act Amendments of 1990 and the date the area is classified under this paragraph.

(2) Reclassification upon failure to attain.—(A) Within 6 months following the applicable attainment date (including any extension thereof) for an ozone nonattainment area, the Administrator shall determine, based on the area's design value (as of the attainment date), whether the area attained the standard by that date. Except for any Severe or Extreme area, any area that the Administrator finds has not attained the standard by that date shall be reclassified by operation of law in accordance with Table 1 of subsection (a) to the higher of—

(i) the next higher classification for the area, or

(ii) the classification applicable to the area's design value as determined at the time of the notice required under subparagraph (B).

No area shall be reclassified as Extreme under clause (ii).

(B) The Administrator shall publish a notice in the Federal Register, no later than 6 months following the attainment date, identifying each area that the Administrator has determined under subparagraph (A) as having failed to attain and identifying the reclassification, if any, described under subparagraph (A).

(3) Voluntary reclassification.—The Administrator shall grant the request of any State to reclassify a nonattainment area in that State in accordance with Table 1 of subsection (a) to a higher classification. The Administrator shall publish a notice in the Federal Register of any such request and of action by the Administrator granting the request.

(4) Failure of severe areas to attain standard.—(A) If any Severe Area fails to achieve the national primary ambient air quality standard for ozone by the applicable attainment date (including any extension thereof), the fee provisions under section 185 shall apply within the area, the percent reduction requirements of section 182(c)(2)(B) and (C) (relating to reasonable further progress demonstration and NO₅x CONTROL) SHALL CONTINUE TO APPLY TO THE AREA, AND THE STATE SHALL DEMONSTRATE THAT SUCH PERCENT REDUCTION HAS BEEN ACHIEVED IN EACH 3-YEAR INTERVAL AFTER SUCH FAILURE UNTIL THE STANDARD IS ATTAINED. ANY FAILURE TO MAKE SUCH A DEMONSTRATION SHALL BE SUBJECT TO THE SANCTIONS PROVIDED UNDER THIS PART.

(B) In addition to the requirements of subparagraph (A), if the ozone design value for a Severe Area referred to in subparagraph (A) is above 0.140 ppm for the year of the applicable attainment date, or if the area has failed to achieve its most recent milestone under section 182(g), the new source review requirements applicable under this subpart in Extreme Areas shall apply in the area and the term “major source” and “major stationary source” shall have the same meaning as in Extreme Areas.

(C) In addition to the requirements of subparagraph (A) for those areas referred to in subparagraph (A) and not covered by subparagraph (B), the provisions referred to in subparagraph (B) shall apply after 3 years from the applicable attainment date unless the area has attained the standard by the end of such 3-year period.

(D) If, after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator modifies the method of determining compliance with the national primary ambient air quality standard, a design value or other indicator comparable to 0.140 in terms of its relationship to the standard shall be used in lieu of 0.140 for purposes of applying the provisions of subparagraphs (B) and (C).

(c) References to Terms.—(1) Any reference in this subpart to a “Marginal Area”, a “Moderate Area”, a “Serious Area”, a “Severe Area”, or an “Extreme Area” shall be considered a reference to a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area as respectively classified under this section.

(2) Any reference in this subpart to “next higher classification” or comparable terms shall be considered a reference to the classification related to the next higher set of design values in Table 1.

SEC. 182. PLAN SUBMISSIONS AND REQUIREMENTS.

(a) Marginal Areas.—Each State in which all or part of a Marginal Area is located shall, with respect to the Marginal Area (or portion thereof, to the extent specified in this subsection), submit to the Administrator the State implementation plan revisions (including the plan items) described under this subsection except to the extent the State has made such submissions as of the date of the enactment of the Clean Air Act Amendments of 1990.

(1) Inventory.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 172(c)(3), in accordance with guidance provided by the Administrator.

(2) Corrections to the state implementation plan.—Within the periods prescribed in this paragraph, the State shall submit a revision to the State implementation plan that meets the following requirements—

(A) Reasonably available control technology corrections.—For any Marginal Area (or, within the Administrator's discretion, portion thereof) the State shall submit, within 6 months of the date of classification under section 181(a), a revision that includes such provisions to correct requirements in (or add requirements to) the plan concerning reasonably available control technology as were required under section 172(b) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990), as interpreted in guidance issued by the Administrator under section 108 before the date of the enactment of the Clean Air Act Amendments of 1990.

(B) Savings clause for vehicle inspection and maintenance.—(i) For any Marginal Area (or, within the Administrator's discretion, portion thereof), the plan for which already includes, or was required by section 172(b)(11)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to have included, a specific schedule for implementation of a vehicle emission control inspection and maintenance program, the State shall submit, immediately after the date of the enactment of the Clean Air Act Amendments of 1990, a revision that includes any provisions necessary to provide for a vehicle inspection and maintenance program of no less stringency than that of either the program defined in House Report Numbered 95–294, 95th Congress, 1st Session, 281–291 (1977) as interpreted in guidance of the Administrator issued pursuant to section 172(b)(11)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) or the program already included in the plan, whichever is more stringent.

(ii) Within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall review, revise, update, and republish in the Federal Register the guidance for the States for motor vehicle inspection and maintenance programs required by this Act, taking into consideration the Administrator's investigations and audits of such program. The guidance shall, at a minimum, cover the frequency of inspections, the types of vehicles to be inspected (which shall include leased vehicles that are registered in the nonattainment area), vehicle maintenance by owners and operators, audits by the State, the test method and measures, including whether centralized or decentralized, inspection methods and procedures, quality of inspection, components covered, assurance that a vehicle subject to a recall notice from a manufacturer has complied with that notice, and effective implementation and enforcement, including ensuring that any retesting of a vehicle after a failure shall include proof of corrective action and providing for denial of vehicle registration in the case of tampering or misfueling. The guidance which shall be incorporated in the applicable State implementation plans by the States shall provide the States with continued reasonable flexibility to fashion effective, reasonable, and fair programs for the affected consumer. No later than 2 years after the Administrator promulgates regulations under section 202(m)(3) (relating to emission control diagnostics), the State shall submit a revision to such program to meet any requirements that the Administrator may prescribe under that section.

(C) Permit programs.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision that includes each of the following:

(i) Provisions to require permits, in accordance with sections 172(c)(5) and 173, for the construction and operation of each new or modified major stationary source (with respect to ozone) to be located in the area.

(ii) Provisions to correct requirements in (or add requirements to) the plan concerning permit programs as were required under section 172(b)(6) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990), as interpreted in regulations of the Administrator promulgated as of the date of the enactment of the Clean Air Act Amendments of 1990.

(3) Periodic inventory.—

(A) General requirement.—No later than the end of each 3-year period after submission of the inventory under paragraph (1) until the area is redesignated to attainment, the State shall submit a revised inventory meeting the requirements of subsection (a)(1).

(B) Emissions statements.—(i) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the State implementation plan to require that the owner or operator of each stationary source of oxides of nitrogen or volatile organic compounds provide the State with a statement, in such form as the Administrator may prescribe (or accept an equivalent alternative developed by the State), for classes or categories of sources, showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source. The first such statement shall be submitted within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. Subsequent statements shall be submitted at least every year thereafter. The statement shall contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

(ii) The State may waive the application of subparagraph (A) to any class or category of stationary sources which emit less than 25 tons per year of volatile organic compounds or oxides of nitrogen if the State, in its submissions under subparagraphs (1) or (3)(A), provides an inventory of emissions from such class or category of sources, based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator.

(4) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.1 to 1.

The Administrator may, in the Administrator's discretion, require States to submit a schedule for submitting any of the revisions or other items required under this subsection. The requirements of this subsection shall apply in lieu of any requirement that the State submit a demonstration that the applicable implementation plan provides for attainment of the ozone standard by the applicable attainment date in any Marginal area. Section 172(c)(9) (relating to contingency measures) shall not apply to Marginal Areas.

(b) Moderate Areas.—Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) (relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

(1) Plan provisions for reasonable further progress.—

(A) General rule.—(i) By no later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to provide for volatile organic compound emission reductions, within 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, of at least 15 percent from baseline emissions, accounting for any growth in emissions after the year in which the Clean Air Act Amendments of 1990 are enacted. Such plan shall provide for such specific annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this Act. This subparagraph shall not apply in the case of oxides of nitrogen for those areas for which the Administrator determines (when the Administrator approves the plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment.

(ii) A percentage less than 15 percent may be used for purposes of clause (i) in the case of any State which demonstrates to the satisfaction of the Administrator that—

(I) new source review provisions are applicable in the nonattainment areas in the same manner and to the same extent as required under subsection (e) in the case of Extreme Areas (with the exception that, in applying such provisions, the terms “major source” and “major stationary source” shall include (in addition to the sources described in section 302) any

stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 5 tons per year of volatile organic compounds);

(II) reasonably available control technology is required for all existing major sources (as defined in subclause (I)); and

(III) the plan reflecting a lesser percentage than 15 percent includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To qualify for a lesser percentage under this clause, a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher category.

(B) Baseline emissions.—For purposes of subparagraph (A), the term “baseline emissions” means the total amount of actual VOC or NO₅x EMISSIONS FROM ALL ANTHROPOGENIC SOURCES IN THE AREA DURING THE CALENDAR YEAR OF THE ENACTMENT OF THE CLEAN AIR ACT AMENDMENTS OF 1990, EXCLUDING EMISSIONS THAT WOULD BE ELIMINATED UNDER THE REGULATIONS DESCRIBED IN CLAUSES (I) AND (II) OF SUBPARAGRAPH (D).

(C) General rule for creditability of reductions.—Except as provided under subparagraph (D), emissions reductions are creditable toward the 15 percent required under subparagraph (A) to the extent they have actually occurred, as of 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, from the implementation of measures required under the applicable implementation plan, rules promulgated by the Administrator, or a permit under title IV.

(D) Limits on creditability of reductions.—Emission reductions from the following measures are not creditable toward the 15 percent reductions required under subparagraph (A):

(i) Any measure relating to motor vehicle exhaust or evaporative emissions promulgated by the Administrator by January 1, 1990.

(ii) Regulations concerning Reid Vapor Pressure promulgated by the Administrator by the date of the enactment of the Clean Air Act Amendments of 1990 or required to be promulgated under section 211(h).

(iii) Measures required under subsection (a)(2)(A) (concerning corrections to implementation plans prescribed under guidance by the Administrator).

(iv) Measures required under subsection (a)(2)(B) to be submitted immediately after the date of the enactment of the Clean Air Act Amendments of 1990 (concerning corrections to motor vehicle inspection and maintenance programs).

(2) Reasonably available control technology.—The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 172(c)(1) with respect to each of the following:

(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between the date of the enactment of the Clean Air Act Amendments of 1990 and the date of attainment.

(B) All VOC sources in the area covered by any CTG issued before the date of the enactment of the Clean Air Act Amendments of 1990.

(C) All other major stationary sources of VOCs that are located in the area.

Each revision described in subparagraph (A) shall be submitted within the period set forth by the Administrator in issuing the relevant CTG document. The revisions with respect to sources described in subparagraphs (B) and (C) shall be submitted by 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, and shall provide for the implementation of the required measures as expeditiously as practicable but no later than May 31, 1995.

(3) Gasoline vapor recovery.—

(A) General rule.—Not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to require all owners or operators of gasoline dispensing systems to install and operate, by the date prescribed under subparagraph (B), a system for gasoline vapor recovery of emissions from the fueling of motor vehicles. The Administrator shall issue guidance as appropriate as to the effectiveness of such system. This subparagraph shall apply only to facilities which sell more than 10,000 gallons of gasoline per month (50,000 gallons per month in the case of an independent small business marketer of gasoline as defined in section 325).

(B) Effective date.—The date required under subparagraph (A) shall be—

(i) 6 months after the adoption date, in the case of gasoline dispensing facilities for which construction commenced after the date of the enactment of the Clean Air Act Amendments of 1990;

(ii) one year after the adoption date, in the case of gasoline dispensing facilities which dispense at least 100,000 gallons of gasoline per month, based on average monthly sales for the 2-year period before the adoption date; or

(iii) 2 years after the adoption date, in the case of all other gasoline dispensing facilities.

Any gasoline dispensing facility described under both clause (i) and clause (ii) shall meet the requirements of clause (i).

(C) Reference to terms.—For purposes of this paragraph, any reference to the term “adoption date” shall be considered a reference to the date of adoption by the State of requirements for the installation and operation of a system for gasoline vapor recovery of emissions from the fueling of motor vehicles.

(4) Motor vehicle inspection and maintenance.—For all Moderate Areas, the State shall submit, immediately after the date of the enactment of the Clean Air Act Amendments of 1990, a revision to the applicable implementation plan that includes provisions necessary to provide for a vehicle inspection and maintenance program as described in subsection (a)(2) (B) (without regard to whether or not the area was required by section 172(b)(11)(B) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to have included a specific schedule for implementation of such a program).

(5) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.15 to 1.

(c) Serious Areas.—Except as otherwise specified in paragraph (4), each State in which all or part of a Serious Area is located shall, with respect to the Serious Area (or portion thereof, to the extent specified in this subsection), make the submissions described under subsection (b) (relating to Moderate Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Serious Area, the terms “major source” and “major stationary source” include (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 50 tons per year of volatile organic compounds.

(1) Enhanced monitoring.—In order to obtain more comprehensive and representative data on ozone air pollution, not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990 the Administrator shall promulgate rules, after notice and public comment, for enhanced monitoring of ozone, oxides of nitrogen, and volatile organic compounds. The rules shall, among other things, cover the location and maintenance of monitors. Immediately following the promulgation of rules by the Administrator relating to enhanced monitoring, the State shall commence such actions as may be necessary to adopt and implement a program based on such rules, to improve monitoring for ambient concentrations of ozone, oxides of nitrogen and volatile organic compounds and to improve monitoring of emissions of oxides of nitrogen and volatile organic compounds. Each State implementation plan for the area shall contain measures to improve the ambient monitoring of such air pollutants.

(2) Attainment and reasonable further progress demonstrations.—Within 4 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan that includes each of the following:

(A) Attainment demonstration.—A demonstration that the plan, as revised, will provide for attainment of the ozone national ambient air quality standard by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective.

(B) Reasonable further progress demonstration.—A demonstration that the plan, as revised, will result in VOC emissions reductions from the baseline emissions described in subsection (b)(1)(B) equal to the following amount averaged over each consecutive 3-year period beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, until the attainment date:

(i) at least 3 percent of baseline emissions each year; or

(ii) an amount less than 3 percent of such baseline emissions each year, if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To lessen the 3 percent requirement under clause (ii), a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher classification. Any determination to lessen the 3 percent requirement shall be reviewed at each milestone under section 182(g) and revised to reflect such new measures (if any) achieved in practice by sources in the same category in any State, allowing a reasonable time to implement such measures. The emission reductions described in this subparagraph shall be calculated in accordance with subsection (b)(1)(C) and (D) (concerning creditability of reductions). The reductions creditable for the period beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, shall include reductions that occurred before such period, computed in accordance with subsection (b)(1), that exceed the 15-percent amount of reductions required under subsection (b)(1)(A).

(C) NO₅x control.—The revision may contain, in lieu of the demonstration required under subparagraph (B), a demonstration to the satisfaction of the Administrator that the applicable implementation plan, as revised, provides for reductions of emissions of VOC's and oxides of nitrogen (calculated according to the creditability provisions of subsection (b)(1) (C) and (D)), that would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required under subparagraph (B). Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue guidance concerning the conditions under which NO₅x CONTROL MAY BE SUBSTITUTED FOR VOC CONTROL OR MAY BE COMBINED WITH VOC CONTROL IN ORDER TO MAXIMIZE THE REDUCTION IN OZONE AIR POLLUTION. IN ACCORD WITH SUCH GUIDANCE, A LESSER PERCENTAGE OF VOCS MAY BE ACCEPTED AS AN ADEQUATE DEMONSTRATION FOR PURPOSES OF THIS SUBSECTION.

(3) Enhanced vehicle inspection and maintenance program.—

(A) Requirement for submission.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to the applicable implementation plan to provide for an enhanced program to reduce hydrocarbon emissions and NO₅x EMISSIONS FROM IN-USE MOTOR VEHICLES REGISTERED IN EACH URBANIZED AREA (IN THE NONATTAINMENT AREA), AS DEFINED BY THE BUREAU OF THE CENSUS, WITH A 1980 POPULATION OF 200,000 OR MORE.

(B) Effective date of state programs; guidance.—The State program required under subparagraph (A) shall take effect no later than 2 years from the date of the enactment of the Clean Air Act Amendments of 1990, and shall comply in all respects

with guidance published in the Federal Register (and from time to time revised) by the Administrator for enhanced vehicle inspection and maintenance programs. Such guidance shall include—

- (i) a performance standard achievable by a program combining emission testing, including on-road emission testing, with inspection to detect tampering with emission control devices and misfueling for all light-duty vehicles and all light-duty trucks subject to standards under section 202; and
- (ii) program administration features necessary to reasonably assure that adequate management resources, tools, and practices are in place to attain and maintain the performance standard.

Compliance with the performance standard under clause (i) shall be determined using a method to be established by the Administrator.

(C) State program.—The State program required under subparagraph (A) shall include, at a minimum, each of the following elements—

- (i) Computerized emission analyzers, including on-road testing devices.
- (ii) No waivers for vehicles and parts covered by the emission control performance warranty as provided for in section 207(b) unless a warranty remedy has been denied in writing, or for tampering-related repairs.
- (iii) In view of the air quality purpose of the program, if, for any vehicle, waivers are permitted for emissions-related repairs not covered by warranty, an expenditure to qualify for the waiver of an amount of \$450 or more for such repairs (adjusted annually as determined by the Administrator on the basis of the Consumer Price Index in the same manner as provided in title IV).
- (iv) Enforcement through denial of vehicle registration (except for any program in operation before the date of the enactment of the Clean Air Act Amendments of 1990 whose enforcement mechanism is demonstrated to the Administrator to be more effective than the applicable vehicle registration program in assuring that noncomplying vehicles are not operated on public roads).
- (v) Annual emission testing and necessary adjustment, repair, and maintenance, unless the State demonstrates to the satisfaction of the Administrator that a biennial inspection, in combination with other features of the program which exceed the requirements of this Act, will result in emission reductions which equal or exceed the reductions which can be obtained through such annual inspections.
- (vi) Operation of the program on a centralized basis, unless the State demonstrates to the satisfaction of the Administrator that a decentralized program will be equally effective. An electronically connected testing system, a licensing system, or other measures (or any combination thereof) may be considered, in accordance with criteria established by the Administrator, as equally effective for such purposes.
- (vii) Inspection of emission control diagnostic systems and the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems.

Each State shall biennially prepare a report to the Administrator which assesses the emission reductions achieved by the program required under this paragraph based on data collected during inspection and repair of vehicles. The methods used to assess the emission reductions shall be those established by the Administrator.

(4) Clean-fuel vehicle programs.—(A) Except to the extent that substitute provisions have been approved by the Administrator under subparagraph (B), the State shall submit to the Administrator, within 42 months of the date of the enactment of the Clean Air Act Amendments of 1990, a revision to the applicable implementation plan for each area described under section 212 to include such measures as may be necessary to ensure the effectiveness of the applicable provisions of the clean-fuel vehicle program prescribed under section 212, including all measures necessary to make the use of clean alternative fuels in clean-fuel vehicles (as defined in section 216) economic from the standpoint of vehicle owners. Such a revision shall also be submitted for each area that opts into the clean fuel-vehicle program as provided in section 212.

(B) The Administrator shall approve, as a substitute for all or a portion of the clean-fuel vehicle program prescribed under section 212, any revision to the relevant applicable implementation plan that in the Administrator's judgment will achieve

long-term reductions in ozone-producing and toxic air emissions equal to those achieved under section 212, or the percentage thereof attributable to the portion of the clean-fuel vehicle program for which the revision is to substitute. The Administrator may approve such revision only if it consists exclusively of provisions other than those required under this Act for the area. Any State seeking approval of such revision must submit the revision to the Administrator within 24 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall approve or disapprove any such revision within 30 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall publish the revision submitted by a State in the Federal Register upon receipt. Such notice shall constitute a notice of proposed rulemaking on whether or not to approve such revision and shall be deemed to comply with the requirements concerning notices of proposed rulemaking contained in sections 553 through 557 of title 5 of the United States Code (related to notice and comment). Where the Administrator approves such revision for any area, the State need not submit the revision required by subparagraph (A) for the area with respect to the portions of the Federal clean-fuel vehicle program for which the Administrator has approved the revision as a substitute.

(C) Where the Administrator approves under section 214 any market-based alternative emissions reduction plan applicable in an area, the Administrator may approve a plan revision for the area providing for changes to the plan provisions otherwise required by this paragraph to ensure consistency with such alternative emissions reduction plan.

(D) If the Administrator determines, under section 179, that the State has failed to submit any portion of the program required under subparagraph (A), then, in addition to any sanction available under section 179, the State may not receive credit, in any demonstration of attainment or reasonable further progress for the area, for any emission reductions from implementation of the corresponding aspects of the Federal clean-fuel vehicle requirements established in section 212.

(5) Transportation control.—(A) Beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990 and each third year thereafter, the State shall submit a demonstration as to whether current aggregate vehicle mileage, aggregate vehicle emissions, congestion levels, and other relevant parameters are consistent with those used for the area's demonstration of attainment. Where such parameters and emissions levels exceed the levels projected for purposes of the area's attainment demonstration, the State shall within 18 months develop and submit a revision of the applicable implementation plan that includes a transportation control measures program consisting of measures that will reduce emissions to levels that are consistent with emissions levels projected in such demonstration. The revision shall be developed in accordance with guidance issued by the Administrator pursuant to section 108(f) and shall include implementation and funding schedules that achieve expeditious emissions reductions in accordance with implementation plan projections. In the alternative, the State may offset the impact of increased vehicle miles traveled and congestion levels by implementing other controls on other source categories that will produce reductions comparable to those that would be achieved by implementation of such transportation demand management program, consistent with the emission reduction schedules in the plan.

(B) Any plan revision under this subsection shall include measures to reduce congestion, including passenger vehicle trips and miles traveled per trip.

(6) De minimis rule.—The new source review provisions under this part shall ensure that increased emissions of volatile organic compounds resulting from any physical change in, or change in the method of operation of, a stationary source located in the area shall not be considered de minimis for purposes of determining the applicability of the permit requirements established by this Act unless the increase in net emissions of such air pollutant from such source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years which includes the calendar year in which such increase occurred.

(7) Special rule for modifications of sources emitting less than 100 tons.—In the case of any major stationary source of volatile organic compounds located in the area (other than a source which emits or has the potential to emit 100 tons or more of volatile organic compounds per year), whenever any change (as described in section 111(a)(4)) at that source results in

any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that such increase shall not be considered a modification for such purposes if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds concerned from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such election, such change shall be considered a modification for such purposes, but in applying section 173(a)(2) in the case of any such modification, the best available control technology (BACT), as defined in section 169, shall be substituted for the lowest achievable emission rate (LAER). The Administrator shall establish and publish policies and procedures for implementing the provisions of this paragraph.

(8) Special rule for modifications of sources emitting 100 tons or more.—In the case of any major stationary source of volatile organic compounds located in the area which emits or has the potential to emit 100 tons or more of volatile organic compounds per year, whenever any change (as described in section 111(a)(4)) at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of section 173(a)(2) (concerning the lowest achievable emission rate (LAER)) shall not apply.

(9) Contingency provisions.—In addition to the contingency provisions required under section 172(c)(9), the plan revision shall provide for the implementation of specific measures to be undertaken if the area fails to meet any applicable milestone. Such measures shall be included in the plan revision as contingency measures to take effect without further action by the State or the Administrator upon a failure by the State to meet the applicable milestone.

(10) General offset requirement.—For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.2 to 1.

Any reference to “attainment date” in subsection (b), which is incorporated by reference into this subsection, shall refer to the attainment date for serious areas.

(d) Severe Areas.—Each State in which all or part of a Severe Area is located shall, with respect to the Severe Area, make the submissions described under subsection (c) (relating to Serious Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Severe Area, the terms “major source” and “major stationary source” include (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 25 tons per year of volatile organic compounds.

(1) Vehicle miles traveled.—Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision that includes all reasonably available techniques for reducing aggregate vehicle emissions and, at a minimum, identifies and adopts specific enforceable strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area. The State shall consider, at a minimum, measures specified in section 108(f). If the State fails to include any such measure, the implementation plan shall contain an explanation of why such measure was not adopted and what emissions reduction measure was adopted to provide a comparable reduction in emissions, or reasons why such reduction is not necessary to attain the national primary ambient air quality standard for ozone.

(2) Offset requirement.—For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.3 to 1, except that if the State plan

requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 169(3)) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

(3) Enforcement under section 185.—By December 31, 2000, the State shall submit a plan revision which includes the provisions required under section 185.

Any reference to the term “attainment date” in subsection (b) or (c), which is incorporated by reference into this subsection (d), shall refer to the attainment date for Severe Areas.

(e) Extreme Areas.—Each State in which all or part of an Extreme Area is located shall, with respect to the Extreme Area, make the submissions described under subsection (d) (relating to Severe Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. The provisions of clause (ii) of subsection (c)(2)(B) (relating to reductions of less than 3 percent) and the provisions of clause (ii) of subsection (b)(1)(A) (relating to reductions of less than 15 percent) shall not apply in the case of an Extreme Area. For any Extreme Area, the terms “major source” and “major stationary source” includes (in addition to the sources described in section 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 10 tons per year of volatile organic compounds.

(1) Offset requirement.—For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.5 to 1, except that if the State plan requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 169(3)) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

(2) Modifications.—Any change (as described in section 111(a)(4)) at a major stationary source which results in any increase in emissions from any discrete operation, unit, or other pollutant emitting activity at the source shall be considered a modification for purposes of section 172(c)(5) and section 173(a), except that for purposes of complying with the offset requirement pursuant to section 173(a)(1), any such increase shall not be considered a modification if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of the air pollutant concerned from other discrete operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. The offset requirements of this part shall not be applicable in Extreme Areas to a modification of an existing source if such modification consists of installation of equipment required to comply with the applicable implementation plan, permit, or this Act.

(3) Use of clean fuels or advanced control technology.—For Extreme Areas, a plan revision shall be submitted within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990 to require, effective 8 years after such date, that each new, modified, and existing electric utility and industrial and commercial boiler which emits more than 25 tons per year of oxides of nitrogen—

(A) burn as its primary fuel natural gas, methanol, or ethanol (or a comparably low polluting fuel), or

(B) use advanced control technology (such as catalytic control technology or other comparably effective control methods) for reduction of emissions of oxides of nitrogen.

For purposes of this subsection, the term “primary fuel” means the fuel which is used 90 percent or more of the operating time. This paragraph shall not apply during any natural gas supply emergency (as defined in title III of the Natural Gas Policy Act of 1978).

(4) Traffic control measures during heavy traffic hours.—For Extreme Areas, each implementation plan revision under this subsection may contain provisions establishing traffic control measures applicable during heavy traffic hours to reduce the use of high polluting vehicles or heavy-duty vehicles, notwithstanding any other provision of law.

(5) New technologies.—The Administrator may, in accordance with section 110, approve provisions of an implementation plan for an Extreme Area which anticipate development of new control techniques or improvement of existing control technologies, and an attainment demonstration based on such provisions, if the State demonstrates to the satisfaction of the Administrator that—

(A) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after the date of the enactment of the Clean Air Act Amendments of 1990; and

(B) the State has submitted enforceable commitments to develop and adopt contingency measures to be implemented as set forth herein if the anticipated technologies do not achieve planned reductions.

Such contingency measures shall be submitted to the Administrator no later than 3 years before proposed implementation of the plan provisions and approved or disapproved by the Administrator in accordance with section 110. The contingency measures shall be adequate to produce emission reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emission reductions required by subsection (b)(1) or (c)(2) and attainment by the applicable dates. If the Administrator determines that an Extreme area has failed to achieve an emission reduction requirement set forth in subsection (b)(1) or (c)(2), and that such failure is due in whole or part to an inability to fully implement provisions approved pursuant to this subsection, the Administrator shall require the State to implement the contingency measures to the extent necessary to assure compliance with subsections (b)(1) and (c)(2).

Any reference to the term “attainment date” in subsection (b), (c), or (d) which is incorporated by reference into this subsection, shall refer to the attainment date for Extreme Areas.

(f) NO₅x Requirements.—The plan provisions required under this subpart for major stationary sources of volatile organic compounds shall also apply to major stationary sources (as defined in section 302 and subsections (c), (d), and (e) of this section) of oxides of nitrogen. This subsection shall not apply in the case of oxides of nitrogen for those sources for which the Administrator determines (when the Administrator approves a plan or plan revision) that net air quality benefits are greater in the absence of reductions of oxides of nitrogen from the sources concerned. This subsection shall also not apply in the case of oxides of nitrogen for—

(1) nonattainment areas not within an ozone transport region under section 184 if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment of the national ambient air quality standard for ozone in the area, or

(2) nonattainment areas within such an ozone transport region if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not produce net ozone air quality benefits in such region.

(g) Milestones.—

(1) Reductions in emissions.—6 years after the date of the enactment of the Clean Air Amendments of 1990 and at intervals of every 3 years after, the State shall determine whether each nonattainment area (other than an area classified as Marginal or Moderate) has achieved a reduction in emissions during the preceding intervals equivalent to the total emission reductions required to be achieved by the end of such interval pursuant to subsection (b)(1) and the corresponding requirements of subsections (c)(2)(B) and (C), (d), and (e). Such reduction shall be referred to in this section as an applicable milestone.

(2) Compliance demonstration.—For each nonattainment area referred to in paragraph (1), not later than 90 days after the date on which an applicable milestone occurs (not including an attainment date on which a milestone occurs in cases where

the standard has been attained), each State in which all or part of such area is located shall submit to the Administrator a demonstration that the milestone has been met. A demonstration under this paragraph shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require, by rule. The Administrator shall determine whether or not a State's demonstration is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

(3) Serious and severe areas; state election.—If a State fails to submit a demonstration under paragraph (2) for any Serious or Severe area within the required period or if the Administrator determines that the area has not met any applicable milestone, the State shall elect, within 90 days after such failure or determination—

(A) to have the area reclassified to the next higher classification,

(B) to implement specific additional measures adequate, as determined by the Administrator, to meet the next milestone as provided in the applicable contingency plan, or

(C) to adopt an economic incentive program as described in paragraph (4).

If the State makes an election under subparagraph (B), the Administrator shall, within 90 days after the election, review such plan and shall, if the Administrator finds the contingency plan inadequate, require further measures necessary to meet such milestone. Once the State makes an election, it shall be deemed accepted by the Administrator as meeting the election requirement. If the State fails to make an election required under this paragraph within the required 90-day period or within 6 months thereafter, the area shall be reclassified to the next higher classification by operation of law at the expiration of such 6-month period. Within 12 months after the date required for the State to make an election, the State shall submit a revision of the applicable implementation plan for the area that meets the requirements of this paragraph. The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

(4) Economic incentive program.—(A) An economic incentive program under this paragraph shall be consistent with rules published by the Administrator and sufficient, in combination with other elements of the State plan, to achieve the next milestone. The State program may include a nondiscriminatory system, consistent with applicable law regarding interstate commerce, of State established emissions fees or a system of marketable permits, or a system of State fees on sale, import, or manufacture of products the use of which contributes to ozone formation, or any combination of the foregoing or other similar measures. The program may also include incentives and requirements to reduce vehicle emissions and vehicle miles traveled in the area, including any of the transportation control measures identified in section 108(f) .

(B) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall publish rules for the programs to be adopted pursuant to subparagraph (A). Such rules shall include model plan provisions which may be adopted for reducing emissions from permitted stationary sources, area sources, and mobile sources. The guidelines shall require that any revenues generated by the plan provisions adopted pursuant to subparagraph (A) shall be used by the State for any of the following:

(i) Providing incentives for achieving emission reductions.

(ii) Providing assistance for the development of innovative technologies for the control of ozone air pollution and for the development of lower-polluting solvents and surface coatings. Such assistance shall not provide for the payment of more than 75 percent of either the costs of any project to develop such a technology or the costs of development of a lower-polluting solvent or surface coating.

(iii) Funding the administrative costs of State programs under this Act. Not more than 50 percent of such revenues may be used for purposes of this clause.

(5) Extreme areas.—If a State fails to submit a demonstration under paragraph (2) for any Extreme Area within the required period, or if the Administrator determines that the area has not met any applicable milestone, the State shall, within 9 months after such failure or determination, submit a plan revision to implement an economic incentive program which meets the requirements of paragraph (4). The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

(h) Rural Transport Areas.—(1) Notwithstanding any other provision of section 181 or this section, a State containing an ozone nonattainment area that does not include, and is not adjacent to, any part of a Metropolitan Statistical Area or, where one exists, a Consolidated Metropolitan Statistical Area (as defined by the United States Bureau of the Census), which area is treated by the Administrator, in the Administrator's discretion, as a rural transport area within the meaning of paragraph (2), shall be treated by operation of law as satisfying the requirements of this section if it makes the submissions required under subsection (a) of this section (relating to marginal areas).

(2) The Administrator may treat an ozone nonattainment area as a rural transport area if the Administrator finds that sources of VOC (and, where the Administrator determines relevant, NO₅x) EMISSIONS WITHIN THE AREA DO NOT MAKE A SIGNIFICANT CONTRIBUTION TO THE OZONE CONCENTRATIONS MEASURED IN THE AREA OR IN OTHER AREAS.

(i) Reclassified Areas.—Each State containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet such requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified, according to the schedules prescribed in connection with such requirements, except that the Administrator may adjust any applicable deadlines (other than attainment dates) to the extent such adjustment is necessary or appropriate to assure consistency among the required submissions.

(j) Multi-State Ozone Nonattainment Areas.—

(1) Coordination among states.—Each State in which there is located a portion of a single ozone nonattainment area which covers more than one State (hereinafter in this section referred to as a “multi-State ozone nonattainment area”) shall—

(A) take all reasonable steps to coordinate, substantively and procedurally, the revisions and implementation of State implementation plans applicable to the nonattainment area concerned; and

(B) use photochemical grid modeling or any other analytical method determined by the Administrator, in his discretion, to be at least as effective.

The Administrator may not approve any revision of a State implementation plan submitted under this part for a State in which part of a multi-State ozone nonattainment area is located if the plan revision for that State fails to comply with the requirements of this subsection.

(2) Failure to demonstrate attainment.—If any State in which there is located a portion of a multi-State ozone nonattainment area fails to provide a demonstration of attainment of the national ambient air quality standard for ozone in that portion within the required period, the State may petition the Administrator to make a finding that the State would have been able to make such demonstration but for the failure of one or more other States in which other portions of the area are located to commit to the implementation of all measures required under section 182 (relating to plan submissions and requirements for ozone nonattainment areas). If the Administrator makes such finding, the provisions of section 179 (relating to sanctions) shall not apply, by reason of the failure to make such demonstration, in the portion of the multi-State ozone nonattainment area within the State submitting such petition.

SEC. 183. FEDERAL OZONE MEASURES.

(a) Control Techniques Guidelines for VOC Sources.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines, in accordance with section 108, for 11 categories of stationary sources of VOC emissions for which such guidelines have not been issued as of such date of enactment, not including the categories referred to in paragraphs (3) and (4) of subsection (b) of this section. The Administrator may issue such additional control techniques guidelines as the Administrator deems necessary.

(b) Existing and New CTGS.—(1) Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, and periodically thereafter, the Administrator shall review and, if necessary, update control technique guidance issued under section 108 before the date of the enactment of the Clean Air Act Amendments of 1990.

(2) In issuing the guidelines, the Administrator shall give priority to those categories which the Administrator considers to make the most significant contribution to the formation of ozone air pollution in ozone nonattainment areas, including hazardous waste treatment, storage, and disposal facilities which are permitted under subtitle C of the Solid Waste Disposal Act. Thereafter the Administrator shall periodically review and, if necessary, revise such guidelines.

(3) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines in accordance with section 108 to reduce the aggregate emissions of volatile organic compounds into the ambient air from aerospace coatings and solvents. Such control techniques guidelines shall, at a minimum, be adequate to reduce aggregate emissions of volatile organic compounds into the ambient air from the application of such coatings and solvents to such level as the Administrator determines may be achieved through the adoption of best available control measures. Such control technology guidance shall provide for such reductions in such increments and on such schedules as the Administrator determines to be reasonable, but in no event later than 10 years after the final issuance of such control technology guidance. In developing control technology guidance under this subsection, the Administrator shall consult with the Secretary of Defense, the Secretary of Transportation, and the Administrator of the National Aeronautics and Space Administration with regard to the establishment of specifications for such coatings. In evaluating VOC reduction strategies, the guidance shall take into account the applicable requirements of section 112 and the need to protect stratospheric ozone.

(4) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue control techniques guidelines in accordance with section 108 to reduce the aggregate emissions of volatile organic compounds and PM-10 into the ambient air from paints, coatings, and solvents used in shipbuilding operations and ship repair. Such control techniques guidelines shall, at a minimum, be adequate to reduce aggregate emissions of volatile organic compounds and PM-10 into the ambient air from the removal or application of such paints, coatings, and solvents to such level as the Administrator determines may be achieved through the adoption of the best available control measures. Such control techniques guidelines shall provide for such reductions in such increments and on such schedules as the Administrator determines to be reasonable, but in no event later than 10 years after the final issuance of such control technology guidance. In developing control techniques guidelines under this subsection, the Administrator shall consult with the appropriate Federal agencies.

(c) Alternative Control Techniques.—Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue technical documents which identify alternative controls for all categories of stationary sources of volatile organic compounds and oxides of nitrogen which emit, or have the potential to emit 25 tons per year or more of such air pollutant. The Administrator shall revise and update such documents as the Administrator determines necessary.

(d) Guidance for Evaluating Cost-Effectiveness.—Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall provide guidance to the States to be used in evaluating the relative cost-effectiveness of various options for the control of emissions from existing stationary sources of air pollutants which contribute to nonattainment of the national ambient air quality standards for ozone.

(e) Control of Emissions From Certain Sources.—

(1) Definitions.—For purposes of this subsection—

(A) Best available controls.—The term “best available controls” means the degree of emissions reduction that the Administrator determines, on the basis of technological and economic feasibility, health, environmental, and energy impacts, is achievable through the application of the most effective equipment, measures, processes, methods, systems or techniques, including chemical reformulation, product or feedstock substitution, repackaging, and directions for use, consumption, storage, or disposal.

(B) Consumer or commercial product.—The term “consumer or commercial product” means any substance, product (including paints, coatings, and solvents), or article (including any container or packaging) held by any person, the use, consumption, storage, disposal, destruction, or decomposition of which may result in the release of volatile organic compounds. The term does not include fuels or fuel additives regulated under section 211, or motor vehicles, non-road vehicles, and non-road engines as defined under section 216.

(C) Regulated entities.—The term “regulated entities” means—

(i) manufacturers, processors, wholesale distributors, or importers of consumer or commercial products for sale or distribution in interstate commerce in the United States; or

(ii) manufacturers, processors, wholesale distributors, or importers that supply the entities listed under clause (i) with such products for sale or distribution in interstate commerce in the United States.

(2) Study and report.—

(A) Study.—The Administrator shall conduct a study of the emissions of volatile organic compounds into the ambient air from consumer and commercial products (or any combination thereof) in order to—

(i) determine their potential to contribute to ozone levels which violate the national ambient air quality standard for ozone; and

(ii) establish criteria for selecting consumer and commercial products or classes or categories thereof which shall be subject to control under this subsection.

The study shall be completed and a report submitted to Congress not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(B) Consideration of certain factors.—In establishing the criteria under subparagraph (A)(ii), the Administrator shall take into consideration each of the following:

(i) The uses, benefits, and commercial demand of consumer and commercial products.

(ii) The health or safety functions (if any) served by such consumer and commercial products.

(iii) Those consumer and commercial products which emit highly reactive volatile organic compounds into the ambient air.

(iv) Those consumer and commercial products which are subject to the most cost-effective controls.

(v) The availability of alternatives (if any) to such consumer and commercial products which are of comparable costs, considering health, safety, and environmental impacts.

(3) Regulations to require emission reductions.—

(A) In general.—Upon submission of the final report referred to in paragraph (2), and from time to time thereafter, the Administrator shall propose regulations for the control of any VOCs from consumer and commercial products which, in

the Administrator's judgment, emit volatile organic compounds into the ambient air that may reasonably be anticipated to contribute to ozone levels that violate the national primary ambient air quality standard for ozone. Such regulations shall take into account the technical feasibility, the costs of achieving such control, the lead time required for such control, and competition. Such regulations may exempt health use products for which the Administrator, in consultation with the Commissioner of the Food and Drug Administration, determines there are no suitable substitute. In order to carry out this section, the Administrator may, by regulation, control or prohibit any activity, including the manufacture or introduction into commerce, offering for sale, or sale of any consumer or commercial product which results in emission of volatile organic compounds into the ambient air. Not later than one year after proposal of regulations under this subsection, the Administrator shall promulgate such regulations. From time to time, and under the same procedures, the Administrator may revise any of the regulations promulgated under this subsection.

(B) Regulated entities.—Regulations under this subsection may be imposed only with respect to regulated entities.

(C) Use of ctgs.—For any consumer or commercial product the Administrator may issue control techniques guidelines under this Act in lieu of regulations required under subparagraph (A) if the Administrator determines that such guidance will be substantially as effective as regulations in reducing emissions of volatile organic compounds which contribute to ozone levels in areas which violate the national ambient air quality standard for ozone.

(4) Best available controls.—Upon submission of the final report under paragraph (2), the Administrator shall list all categories of commercial or consumer products which release significant evaporative emissions of VOCs. At such time the Administrator shall divide the list into 4 groups establishing priorities for regulation based on the factors listed in paragraph (2). Every 2 years after promulgating such list the Administrator shall regulate one group of categories until all 4 groups are regulated. The regulations shall require best available controls.

(5) Systems of regulation.—The regulations under this subsection may include any system or systems of regulation as the Administrator may deem appropriate, including requirements for registration and labeling, self-monitoring and reporting, prohibitions, limitations, or reasonable fees, charges, and other economic incentives (including marketable permits and auctions of emissions rights) concerning the manufacture, processing, distribution, use, consumption, or disposal of the product.

(6) Fees, etc.—Any fees, charges, or other funds established and collected by the Administrator under such regulations shall be deposited in a special fund in the United States Treasury for licensing and other services, which thereafter shall be available until expended, subject to annual appropriation Acts, solely to carry out the activities of the Administrator for which such fees, charges, or collections are established or made.

(7) Enforcement.—Any regulation established under this subsection shall be treated, for purposes of enforcement of this Act, as a standard under section 111 and any violation of such regulation shall be treated as a violation of a requirement of section 111(e).

(8) State administration.—Each State may develop and submit to the Administrator a procedure under State law for implementing and enforcing regulations promulgated under this subsection. If the Administrator finds the State procedure is adequate, the Administrator shall approve such procedure. Nothing in this paragraph shall prohibit the Administrator from enforcing any applicable regulations under this subsection.

(9) Size, etc.—No regulations regarding the size, shape, or labeling of a product may be promulgated, unless the Administrator determines such regulations to be useful in meeting any national ambient air quality standard.

(10) State consultation.—Any State which proposes regulations other than those adopted under this subsection shall consult with the Administrator regarding whether any other State or local subdivision has promulgated or is promulgating regulations

on any products covered under this part. The Administrator shall establish a clearinghouse of information, studies, and regulations proposed and promulgated regarding products covered under this subsection and disseminate such information collected as requested by State or local subdivisions.

(f) Marine Vessel Standards.—

(1) Schedule for standards.—(A) Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards applicable to the emission of VOCs and any other air pollutant from loading and unloading of marine tank vessels which the Administrator finds causes, or contributes to, air pollution that may be reasonably anticipated to endanger public health or welfare. Such standards shall require the application of reasonably available control technology, considering costs, any nonair-quality benefits, environmental impacts, energy requirements and safety factors associated with alternative control techniques. To the extent practicable such standards shall apply to loading and unloading facilities and not to marine vessels.

(B) Any regulation prescribed under this subsection (and any revision thereof) shall take effect after such period as the Administrator finds (after consultation with the Secretary of the department in which the Coast Guard is operating) necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period, except that the effective date shall not be more than 2 years after promulgation of such regulations.

(2) Regulations on equipment safety.—Within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Secretary of the Department in which the Coast Guard is operating shall issue regulations to ensure the safety of the equipment and operations which are to control emissions from the loading and unloading of marine tank vessels, under section 3703 of title 46 of the United States Code and section 6 of the Ports and Waterways Safety Act (33 U.S.C. 1225). The regulations issued by a State or political subdivision regarding emissions from the loading and unloading of marine tank vessels shall be consistent with the regulations regarding safety of the Department in which the Coast Guard is operating.

(3) Agency authority.—(A) The Administrator shall ensure compliance with the vessel emission standards prescribed under paragraph (1)(A).

(B) The Secretary of the Department in which the Coast Guard is operating shall ensure compliance with the regulations issued under paragraph (2).

(4) State or local standards.—After the Administrator promulgates standards under this section, no State or political subdivision thereof may adopt or attempt to enforce any standard respecting emissions from marine vessels subject to regulation under paragraph (1) unless such standard is no less stringent than the standards promulgated under paragraph (1).

(5) Enforcement.—Any standard established under paragraph (1)(A) shall be treated, for purposes of enforcement of this Act, as a standard under section 111 and any violation of such standard shall be treated as a violation of a requirement of section 111(e).

(g) Ozone Design Value Study.—The Administrator shall conduct a study of whether the methodology in use by the Environmental Protection Agency as of the date of the enactment of the Clean Air Act Amendments of 1990 for establishing a design value for ozone provides a reasonable indicator of the ozone air quality of ozone nonattainment areas. The Administrator shall obtain input from States, local subdivisions thereof, and others. The study shall be completed and a report submitted to Congress not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990. The results of the study shall be subject to peer and public review before submitting it to Congress.

SEC. 184. CONTROL OF INTERSTATE OZONE AIR POLLUTION.

(a) Ozone Transport Regions.—A single transport region for ozone (within the meaning of section 176A(a)), comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia, is hereby established by operation of law. The provisions of section 176A(a) (1) and (2) shall apply with respect to the transport region established under this section and any other transport region established for ozone, except to the extent inconsistent with the provisions of this section. The Administrator shall convene the commission required (under section 176A(b)) as a result of the establishment of such region within 6 months of the date of the enactment of the Clean Air Act Amendments of 1990.

(b) Plan Provisions for States in Ozone Transport Regions.—(1) In accordance with section 110, not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 (or 9 months after the subsequent inclusion of a State in a transport region established for ozone), each State included within a transport region established for ozone shall submit a State implementation plan or revision thereof to the Administrator which requires the following—

(A) that each area in such State that is in an ozone transport region, and that is a metropolitan statistical area or part thereof with a population of 100,000 or more comply with the provisions of section 182(c)(2)(A) (pertaining to enhanced vehicle inspection and maintenance programs); and

(B) implementation of reasonably available control technology with respect to all sources of volatile organic compounds in the State covered by a control techniques guideline issued before or after the date of the enactment of the Clean Air Act Amendments of 1990.

(2) Within 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study identifying control measures capable of achieving emission reductions comparable to those achievable through vehicle refueling controls contained in section 182(b)(3), and such measures or such vehicle refueling controls shall be implemented in accordance with the provisions of this section. Notwithstanding other deadlines in this section, the applicable implementation plan shall be revised to reflect such measures within 1 year of completion of the study. For purposes of this section any stationary source that emits or has the potential to emit at least 50 tons per year of volatile organic compounds shall be considered a major stationary source and subject to the requirements which would be applicable to major stationary sources if the area were classified as a Moderate nonattainment area.

(c) Additional Control Measures.—

(1) Recommendations.—Upon petition of any State within a transport region established for ozone, and based on a majority vote of the Governors on the Commission (or their designees), the Commission may, after notice and opportunity for public comment, develop recommendations for additional control measures to be applied within all or a part of such transport region if the commission determines such measures are necessary to bring any area in such region into attainment by the dates provided by this subpart. The commission shall transmit such recommendations to the Administrator.

(2) Notice and review.—Whenever the Administrator receives recommendations prepared by a commission pursuant to paragraph (1) (the date of receipt of which shall hereinafter in this section be referred to as the “receipt date”), the Administrator shall—

(A) immediately publish in the Federal Register a notice stating that the recommendations are available and provide an opportunity for public hearing within 90 days beginning on the receipt date; and

(B) commence a review of the recommendations to determine whether the control measures in the recommendations are necessary to bring any area in such region into attainment by the dates provided by this subpart and are otherwise consistent with this Act.

(3) Consultation.—In undertaking the review required under paragraph (2)(B), the Administrator shall consult with members of the commission of the affected States and shall take into account the data, views, and comments received pursuant to paragraph (2)(A).

(4) Approval and disapproval.—Within 9 months after the receipt date, the Administrator shall (A) determine whether to approve, disapprove, or partially disapprove and partially approve the recommendations; (B) notify the commission in writing of such approval, disapproval, or partial disapproval; and (C) publish such determination in the Federal Register. If the Administrator disapproves or partially disapproves the recommendations, the Administrator shall specify—

(i) why any disapproved additional control measures are not necessary to bring any area in such region into attainment by the dates provided by this subpart or are otherwise not consistent with the Act; and

(ii) recommendations concerning equal or more effective actions that could be taken by the commission to conform the disapproved portion of the recommendations to the requirements of this section.

(5) Finding.—Upon approval or partial approval of recommendations submitted by a commission, the Administrator shall issue to each State which is included in the transport region and to which a requirement of the approved plan applies, a finding under section 110(k)(5) that the implementation plan for such State is inadequate to meet the requirements of section 110(a)(2)(D). Such finding shall require each such State to revise its implementation plan to include the approved additional control measures within one year after the finding is issued.

(d) Best Available Air Quality Monitoring and Modeling.—For purposes of this section, not later than 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate criteria for purposes of determining the contribution of sources in one area to concentrations of ozone in another area which is a nonattainment area for ozone. Such criteria shall require that the best available air quality monitoring and modeling techniques be used for purposes of making such determinations.

SEC. 185. ENFORCEMENT FOR SEVERE AND EXTREME OZONE NONATTAINMENT AREAS FOR FAILURE TO ATTAIN.

(a) General Rule.—Each implementation plan revision required under section 182(d) and (e) (relating to the attainment plan for Severe and Extreme ozone nonattainment areas) shall provide that, if the area to which such plan revision applies has failed to attain the national primary ambient air quality standard for ozone by the applicable attainment date, each major stationary source of VOCs located in the area shall, except as otherwise provided under subsection (c), pay a fee to the State as a penalty for such failure, computed in accordance with subsection (b), for each calendar year beginning after the attainment date, until the area is redesignated as an attainment area for ozone. Each such plan revision should include procedures for assessment and collection of such fees.

(b) Computation of Fee.—

(1) Fee amount.—The fee shall equal \$5,000, adjusted in accordance with paragraph (3), per ton of VOC emitted by the source during the calendar year in excess of 80 percent of the baseline amount, computed under paragraph (2).

(2) Baseline amount.—For purposes of this section, the baseline amount shall be computed, in accordance with such guidance as the Administrator may provide, as the lower of the amount of actual VOC emissions (“actuals”) or VOC emissions allowed

under the permit applicable to the source (or, if no such permit has been issued for the attainment year, the amount of VOC emissions allowed under the applicable implementation plan ("allowables")) during the attainment year. Notwithstanding the preceding sentence, the Administrator may issue guidance authorizing the baseline amount to be determined in accordance with the lower of average actuals or average allowables, determined over a period of more than one calendar year. Such guidance may provide that such average calculation for a specific source may be used if that source's emissions are irregular, cyclical, or otherwise vary significantly from year to year.

(3) Annual adjustment.—The fee amount under paragraph (1) shall be adjusted annually, beginning in the year beginning after the year of enactment, in accordance with section 402(b)(3)(B)(v) (relating to inflation adjustment).

(c) Exception.—Notwithstanding any provision of this section, no source shall be required to pay any fee under subsection (a) with respect to emissions during any year that is treated as an Extension Year under section 181(a)(5).

(d) Fee Collection by the Administrator.—If the Administrator has found that the fee provisions of the implementation plan do not meet the requirements of this section, or if the Administrator makes a finding that the State is not administering and enforcing the fee required under this section, the Administrator shall, in addition to any other action authorized under this title, collect, in accordance with procedures promulgated by the Administrator, the unpaid fees required under subsection (a). If the Administrator makes such a finding under section 179(a)(4), the Administrator may collect fees for periods before the determination, plus interest computed in accordance with section 6621(a)(2) of the Internal Revenue Code of 1986 (relating to computation of interest on underpayment of Federal taxes), to the extent the Administrator finds such fees have not been paid to the State. The provisions of clauses (ii) through (iii) of section 402(b)(3)(C) (relating to penalties and use of the funds, respectively) shall apply with respect to fees collected under this subsection.

(e) Exemptions for Certain Small Areas.—For areas with a total population under 200,000 which fail to attain the standard by the applicable attainment date, no sanction under this section or under any other provision of this Act shall apply if the area can demonstrate, consistent with guidance issued by the Administrator, that attainment in the area is prevented because of ozone or ozone precursors transported from other areas. The prohibition applies only in cases in which the area has met all requirements and implemented all measures applicable to the area under this Act.

SEC. 185A. TRANSITIONAL AREAS.

If an area has not violated the NAAQS for ozone for the 36-month period commencing on January 1, 1987, and ending on December 31, 1989, the Administrator shall suspend the requirements of this subpart until December 31, 1991. By June 30, 1992, the Administrator shall determine by order, based on the area's design value as of the attainment date, whether the area attained such standard by December 31, 1991. If the Administrator determines that the area attained the standard, the Administrator shall require, as part of the order, the State to submit a maintenance plan for the area within 12 months of such determination. If the Administrator determines that the area failed to attain the standard, the Administrator shall, by June 30, 1992, designate the area as nonattainment under section 107(d)(4).

SEC. 185B. NO₅x AND VOC STUDY.

The Administrator, in conjunction with the National Academy of Sciences, shall conduct a study on the role of ozone precursors in tropospheric ozone formation and control. The study should examine the roles of oxides of nitrogen and volatile organic compounds emission reductions, the role of biogenic volatile organic compounds emissions, and the basic information required for air quality models. The study should be completed and a report submitted to Congress within 2 years of the date of the enactment of the Clean Air Act Amendments of 1990.

SUBPART 3—ADDITIONAL PROVISIONS FOR CARBON MONOXIDE NONATTAINMENT AREAS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 186. CLASSIFICATION AND ATTAINMENT DATES.

(a) Classification by Operation of Law and Attainment Dates for Nonattainment Areas.—(1) Each area designated nonattainment for carbon monoxide pursuant to section 107(d) shall be classified at the time of such designation under Table 1, by operation of law, as a Moderate Area or a Serious Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the date of the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for carbon monoxide shall be as expeditiously as practicable but not later than the date provided in Table 1:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(2) At the time of publication of the notice required under section 107 (designating carbon monoxide nonattainment areas), the Administrator shall publish a notice announcing the classification of each such carbon monoxide nonattainment area. The provisions of section 172(a)(1)(B) (relating to lack of notice-and-comment and judicial review) shall apply with respect to such classification.

(3) If an area classified under paragraph (1), Table 1, would have been classified in another category if the design value in the area were 5 percent greater or 5 percent less than the level on which such classification was based, the Administrator may, in the Administrator's discretion, within 90 days after the date of the enactment of the Clean Air Act Amendments of 1990 by the procedure required under paragraph (2), adjust the classification of the area. In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for carbon monoxide in the area, the level of pollution transport between the area and the other affected areas, and the mix of sources and air pollutants in the area. The Administrator may make the same adjustment for purposes of paragraphs (2), (3), (6), and (7) of section 187(a).

(4) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter in this subpart referred to as the "Extension Year") the date specified in Table 1 of subsection (a) if—

(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(B) no more than one exceedance of the national ambient air quality standard level for carbon monoxide has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

(b) New Designations and Reclassifications.—

(1) New designations to nonattainment.—Any area that is designated attainment or unclassifiable for carbon monoxide under section 107(d)(4), and that is subsequently redesignated to nonattainment for carbon monoxide under section 107(d)(3), shall, at the time of the redesignation, be classified by operation of law in accordance with Table 1 under subsections (a)(1) and (a)(4). Upon its classification, the area shall be subject to the same requirements under section 110, subpart 1 of this part, and this subpart that would have applied had the area been so classified at the time of the notice under subsection (a)(2), except that any absolute, fixed date applicable in connection with any such requirement is extended by operation of law by a period equal to the length of time between the date of the enactment of the Clean Air Act Amendments of 1990 and the date the area is classified.

(2) Reclassification of moderate areas upon failure to attain.—

(A) General rule.—Within 6 months following the applicable attainment date for a carbon monoxide nonattainment area, the Administrator shall determine, based on the area's design value as of the attainment date, whether the area has attained the standard by that date. Any Moderate Area that the Administrator finds has not attained the standard by that date shall be reclassified by operation of law in accordance with Table 1 of subsection (a)(1) as a Serious Area.

(B) Publication of notice.—The Administrator shall publish a notice in the Federal Register, no later than 6 months following the attainment date, identifying each area that the Administrator has determined, under subparagraph (A), as having failed to attain and identifying the reclassification, if any, described under subparagraph (A).

(c) References to Terms.—Any reference in this subpart to a “Moderate Area” or a “Serious Area” shall be considered a reference to a Moderate Area or a Serious Area, respectively, as classified under this section.

SEC. 187. PLAN SUBMISSIONS AND REQUIREMENTS.

(a) Moderate Areas.—Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area (or portion thereof, to the extent specified in guidance of the Administrator issued before the date of the enactment of the Clean Air Act Amendments of 1990), submit to the Administrator the State implementation plan revisions (including the plan items) described under this subsection, within such periods as are prescribed under this subsection, except to the extent the State has made such submissions as of such date of enactment:

(1) Inventory.—No later than 2 years from the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 172(c)(3), in accordance with guidance provided by the Administrator.

(2) Vehicle miles traveled.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, for areas with a design value above 12.7 ppm at the time of classification, the plan revision shall contain a forecast of vehicle miles traveled in the nonattainment area concerned for each year before the year in which the plan projects the national ambient air quality standard for carbon monoxide to be attained in the area. The forecast shall be based on guidance which shall be published by the Administrator within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990. The plan revision shall provide for annual updates of the forecasts to be submitted to the Administrator together with annual reports regarding the extent to which such forecasts proved to be accurate. Such annual reports shall contain estimates of actual vehicle miles traveled in each year for which a forecast was required.

(3) Contingency provisions.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, for areas with a design value above 12.7 ppm at the time of classification, the plan revision shall provide for the implementation of specific measures to be undertaken if any estimate of vehicle miles traveled in the area which is submitted in an annual report under paragraph (2) exceeds the number predicted in the most recent prior forecast or if the area fails to attain the national primary ambient air quality standard for carbon monoxide by the primary standard attainment date. Such measures shall be included in the plan revision as contingency measures to take effect without further action by the State or the Administrator if the prior forecast has been exceeded by an updated forecast or if the national standard is not attained by such deadline.

(4) Savings clause for vehicle inspection and maintenance provisions of the state implementation plan.—Immediately after the date of the enactment of the Clean Air Act Amendments of 1990, for any Moderate area (or, within the Administrator's discretion, portion thereof), the plan for which is of the type described in section 182(a)(2)(B) any provisions necessary to

ensure that the applicable implementation plan includes the vehicle inspection and maintenance program described in section 182(a)(2)(B).

(5) Periodic inventory.—No later than September 30, 1995, and no later than the end of each 3 year period thereafter, until the area is redesignated to attainment, a revised inventory meeting the requirements of subsection (a)(1).

(6) Enhanced vehicle inspection and maintenance.—No later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 in the case of Moderate Areas with a design value greater than 12.7 ppm at the time of classification, a revision that includes provisions for an enhanced vehicle inspection and maintenance program as required in section 182(c) (3) (concerning serious ozone nonattainment areas), except that such program shall be for the purpose of reducing carbon monoxide rather than hydrocarbon emissions.

(7) Attainment demonstration and specific annual emission reductions.—In the case of Moderate Areas with a design value greater than 12.7 ppm at the time of classification, no later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, a revision to provide, and a demonstration that the plan as revised will provide, for attainment of the carbon monoxide NAAQS by the applicable attainment date and provisions for such specific annual emission reductions as are necessary to attain the standard by that date.

The Administrator may, in the Administrator's discretion, require States to submit a schedule for submitting any of the revisions or other items required under this subsection. In the case of Moderate Areas with a design value of 12.7 ppm or lower at the time of classification, the requirements of this subsection shall apply in lieu of any requirement that the State submit a demonstration that the applicable implementation plan provides for attainment of the carbon monoxide standard by the applicable attainment date.

(b) Serious Areas.—Each State in which all or part of a Serious Area is located shall, with respect to the Serious Area, make the submissions applicable under subsection (a) to Moderate Areas with a design value of 12.7 ppm or greater at the time of classification, and shall also submit the revision and other items described under this subsection. Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990 the State shall submit a revision that includes the transportation control measures as required in section 182(d)(1) except that such revision shall be for the purpose of reducing CO emissions rather than volatile organic compound emissions. Within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the State shall submit a revision to require that gasoline sold, supplied, offered for sale or supply, dispensed, transported or introduced into commerce in the larger of—

(1) the Consolidated Metropolitan Statistical Area (as defined by the United States Office of Management and Budget) (CMSA) in which the area is located, or

(2) if the area is not located in a CMSA, the Metropolitan Statistical Area (as defined by the United States Office of Management and Budget) in which the area is located,

be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide (as determined by the Administrator), with fuels containing such level of oxygen as is necessary, in combination with other measures, to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of the national ambient air quality standard thereafter in the area. The revision shall provide that such requirement shall take effect no later than October 1, 1993, and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator. Notwithstanding the preceding provisions of in this paragraph, the revision described in this paragraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of the national ambient air quality standard thereafter in the area.

(c) Areas With Significant Stationary Source Emissions of CO.—

(1) Serious areas.—In the case of Serious Areas in which stationary sources contribute significantly to carbon monoxide levels (as determined under rules issued by the Administrator), the State shall submit a plan revision within 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, which provides that the term “major stationary source” includes (in addition to the sources described in section 302) any stationary source which emits, or has the potential to emit, 50 tons per year or more of carbon monoxide.

(2) Waivers for certain areas.—The Administrator may, on a case-by-case basis, waive any requirements that pertain to transportation controls, inspection and maintenance, or oxygenated fuels where the Administrator determines by rule that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in the area.

(3) Guidelines.—Within 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall issue guidelines for and rules determining whether stationary sources contribute significantly to carbon monoxide levels in an area.

(d) CO Milestone.—

(1) Milestone demonstration.—By March 31, 1996, each State in which all or part of a Serious Area is located shall submit to the Administrator a demonstration that the area has achieved a reduction in emissions of CO equivalent to the total of the specific annual emission reductions required by December 31, 1995. Such reductions shall be referred to in this subsection as the milestone.

(2) Adequacy of demonstration.—A demonstration under this paragraph shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require. The Administrator shall determine whether or not a State's demonstration is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

(3) Failure to meet emission reduction milestone.—If a State fails to submit a demonstration under paragraph (1) within the required period, or if the Administrator notifies the State that the State has not met the milestone, the State shall, within 9 months after such a failure or notification, submit a plan revision to implement an economic incentive and transportation control program as described in section 182(g)(4). Such revision shall be sufficient to achieve the specific annual reductions in carbon monoxide emissions set forth in the plan by the attainment date.

(e) Multi-State CO Nonattainment Areas.—

(1) Coordination among states.—Each State in which there is located a portion of a single nonattainment area for carbon monoxide which covers more than one State (“multi-State nonattainment area”) shall take all reasonable steps to coordinate, substantively and procedurally, the revisions and implementation of State implementation plans applicable to the nonattainment area concerned. The Administrator may not approve any revision of a State implementation plan submitted under this part for a State in which part of a multi-State nonattainment area is located if the plan revision for that State fails to comply with the requirements of this subsection.

(2) Failure to demonstrate attainment.—If any State in which there is located a portion of a multi-State nonattainment area fails to provide a demonstration of attainment of the national ambient air quality standard for carbon monoxide in that portion within the period required under this part the State may petition the Administrator to make a finding that the State would have been able to make such demonstration but for the failure of one or more other States in which other portions of the area are located to commit to the implementation of all measures required under section 187 (relating to plan submissions for carbon

monoxide nonattainment areas). If the Administrator makes such finding, in the portion of the nonattainment area within the State submitting such petition, no sanction shall be imposed under section 179 or under any other provision of this Act, by reason of the failure to make such demonstration.

(f) **Reclassified Areas.**—Each State containing a carbon monoxide nonattainment area reclassified under section 186(b)(2) shall meet the requirements of subsection (b) of this section, as may be applicable to the area as reclassified, according to the schedules prescribed in connection with such requirements, except that the Administrator may adjust any applicable deadlines (other than the attainment date) where such deadlines are shown to be infeasible.

(g) **Failure of Serious Area to Attain Standard.**—If the Administrator determines under section 186(b)(2) that the national primary ambient air quality standard for carbon monoxide has not been attained in a Serious Area by the applicable attainment date, the State shall submit a plan revision for the area within 9 months after the date of such determination. The plan revision shall provide that a program of incentives and requirements as described in section 182(g)(4) shall be applicable in the area, and such program, in combination with other elements of the revised plan, shall be adequate to reduce the total tonnage of emissions of carbon monoxide in the area by at least 5 percent per year in each year after approval of the plan revision and before attainment of the national primary ambient air quality standard for carbon monoxide.

SUBPART 4—ADDITIONAL PROVISIONS FOR PARTICULATE MATTER NONATTAINMENT AREAS

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 188. CLASSIFICATIONS AND ATTAINMENT DATES.

(a) **Initial Classifications.**—Every area designated nonattainment for PM₁₀ pursuant to section 107(d) shall be classified at the time of such designation, by operation of law, as a moderate PM₁₀ nonattainment area (also referred to in this subpart as a “Moderate Area”) at the time of such designation. At the time of publication of the notice under section 107(d)(4) (relating to area designations) for each PM₁₀ nonattainment area, the Administrator shall publish a notice announcing the classification of such area. The provisions of section 172(a)(1)(B) (relating to lack of notice-and-comment and judicial review) shall apply with respect to such classification.

(b) **Reclassification as Serious.**—

(1) **Reclassification before attainment date.**—The Administrator may reclassify as a Serious PM₁₀ nonattainment area (identified in this subpart also as a “Serious Area”) any area that the Administrator determines cannot practicably attain the national ambient air quality standard for PM₁₀ by the attainment date (as prescribed in subsection (c)) for Moderate Areas. The Administrator shall reclassify appropriate areas as Serious by the following dates:

(A) For areas designated nonattainment for PM₁₀ under section 107(d)(4), the Administrator shall propose to reclassify appropriate areas by June 30, 1991, and take final action by December 31, 1991.

(B) For areas subsequently designated nonattainment, the Administrator shall reclassify appropriate areas within 18 months after the required date for the State’s submission of a SIP for the Moderate Area.

(2) **Reclassification upon failure to attain.**—Within 6 months following the applicable attainment date for a PM₁₀ nonattainment area, the Administrator shall determine whether the area attained the standard by that date. If the Administrator finds that any Moderate Area is not in attainment after the applicable attainment date—

(A) the area shall be reclassified by operation of law as a Serious Area; and

(B) the Administrator shall publish a notice in the Federal Register no later than 6 months following the attainment date, identifying the area as having failed to attain and identifying the reclassification described under subparagraph (A).

(c) Attainment Dates.—Except as provided under subsection (d), the attainment dates for PM-10 nonattainment areas shall be as follows:

(1) Moderate areas.—For a Moderate Area, the attainment date shall be as expeditiously as practicable but no later than the end of the sixth calendar year after the area's designation as nonattainment, except that, for areas designated nonattainment for PM-10 under section 107(d)(4), the attainment date shall not extend beyond December 31, 1994.

(2) Serious areas.—For a Serious Area, the attainment date shall be as expeditiously as practicable but no later than the end of the tenth calendar year beginning after the area's designation as nonattainment, except that, for areas designated nonattainment for PM-10 under section 107(d)(4), the date shall not extend beyond December 31, 2001.

(d) Extension of Attainment Date for Moderate Areas.—Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the “Extension Year”) the date specified in paragraph (c)(1) if—

(1) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(2) no more than one exceedance of the 24-hour national ambient air quality standard level for PM-10 has occurred in the area in the year preceding the Extension Year, and the annual mean concentration of PM-10 in the area for such year is less than or equal to the standard level.

No more than 2 one-year extensions may be issued under the subsection for a single nonattainment area.

(e) Extension of Attainment Date for Serious Areas.—Upon application by any State, the Administrator may extend the attainment date for a Serious Area beyond the date specified under subsection (c), if attainment by the date established under subsection (c) would be impracticable, the State has complied with all requirements and commitments pertaining to that area in the implementation plan, and the State demonstrates to the satisfaction of the Administrator that the plan for that area includes the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any State, and can feasibly be implemented in the area. At the time of such application, the State must submit a revision to the implementation plan that includes a demonstration of attainment by the most expeditious alternative date practicable. In determining whether to grant an extension, and the appropriate length of time for any such extension, the Administrator may consider the nature and extent of nonattainment, the types and numbers of sources or other emitting activities in the area (including the influence of uncontrollable natural sources and transboundary emissions from foreign countries), the population exposed to concentrations in excess of the standard, the presence and concentration of potentially toxic substances in the mix of particulate emissions in the area, and the technological and economic feasibility of various control measures. The Administrator may not approve an extension until the State submits an attainment demonstration for the area. The Administrator may grant at most one such extension for an area, of no more than 5 years.

(f) Waivers for Certain Areas.—The Administrator may, on a case-by-case basis, waive any requirement applicable to any Serious Area under this subpart where the Administrator determines that anthropogenic sources of PM-10 do not contribute significantly to the violation of the PM-10 standard in the area. The Administrator may also waive a specific date for attainment of the standard where the Administrator determines that nonanthropogenic sources of PM-10 contribute significantly to the violation of the PM-10 standard in the area.

SEC. 189. PLAN PROVISIONS AND SCHEDULES FOR PLAN SUBMISSIONS.

(a) Moderate Areas.—

(1) Plan provisions.—Each State in which all or part of a Moderate Area is located shall submit, according to the applicable schedule under paragraph (2), an implementation plan that includes each of the following:

(A) For the purpose of meeting the requirements of section 172(c)(5), a permit program providing that permits meeting the requirements of section 173 are required for the construction and operation of new and modified major stationary sources of PM-10.

(B) Either (i) a demonstration (including air quality modeling) that the plan will provide for attainment by the applicable attainment date; or (ii) a demonstration that attainment by such date is impracticable.

(C) Provisions to assure that reasonably available control measures for the control of PM-10 shall be implemented no later than December 10, 1993, or 4 years after designation in the case of an area classified as moderate after the date of the enactment of the Clean Air Act Amendments of 1990.

(2) Schedule for plan submissions.—A State shall submit the plan required under subparagraph (1) no later than the following:

(A) Within 1 year of the date of the enactment of the Clean Air Act Amendments of 1990, for areas designated nonattainment under section 107(d)(4), except that the provision required under subparagraph (1)(A) shall be submitted no later than June 30, 1992.

(B) 18 months after the designation as nonattainment, for those areas designated nonattainment after the designations prescribed under section 110(b)(4).

(b) Serious Areas.—

(1) Plan provisions.—In addition to the provisions submitted to meet the requirements of paragraph (a)(1) (relating to Moderate Areas), each State in which all or part of a Serious Area is located shall submit an implementation plan for such area that includes each of the following:

(A) A demonstration (including air quality modeling)—

(i) that the plan provides for attainment of the PM-10 national ambient air quality standard by the applicable attainment date, or

(ii) for any area for which the State is seeking, pursuant to section 188(e), an extension of the attainment date beyond the date set forth in section 188(c), that attainment by that date would be impracticable, and that the plan provides for attainment by the most expeditious alternative date practicable.

(B) Provisions to assure that the best available control measures for the control of PM-10 shall be implemented no later than 4 years after the date the area is classified (or reclassified) as a Serious Area.

(2) Schedule for plan submissions.—A State shall submit the demonstration required for an area under paragraph (1)(A) no later than 4 years after reclassification of the area to Serious, except that for areas reclassified under section 188(b)(2), the State shall submit the attainment demonstration within 18 months after reclassification to Serious. A State shall submit the provisions described under paragraph (1)(B) no later than 18 months after reclassification of the area as a Serious Area.

(3) Major sources.—For any Serious Area, the terms “major source” and “major stationary source” include any stationary source or group of stationary sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 70 tons per year of PM-10.

(c) Milestones.—(1) Plan revisions demonstrating attainment submitted to the Administrator for approval under this subpart shall contain quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment and which demonstrate reasonable further progress, as defined in section 171(1), toward attainment by the applicable date.

(2) Not later than 90 days after the date on which a milestone applicable to the area occurs, each State in which all or part of such area is located shall submit to the Administrator a demonstration that all measures in the plan approved under this section have been implemented and that the milestone has been met. A demonstration under this subsection shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require. The Administrator shall determine whether or not a State's demonstration under this subsection is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

(3) If a State fails to submit a demonstration under paragraph (2) with respect to a milestone within the required period or if the Administrator determines that the area has not met any applicable milestone, the Administrator shall require the State, within 9 months after such failure or determination to submit a plan revision that assures that the State will achieve the next milestone (or attain the national ambient air quality standard for PM-10, if there is no next milestone) by the applicable date.

(d) Failure To Attain.—In the case of a Serious PM-10 nonattainment area in which the PM-10 standard is not attained by the applicable attainment date, the State in which such area is located shall, after notice and opportunity for public comment, submit within 12 months after the applicable attainment date, plan revisions which provide for attainment of the PM-10 air quality standard and, from the date of such submission until attainment, for an annual reduction in PM-10 or PM-10 precursor emissions within the area of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared for such area.

(e) PM-10 Precursors.—The control requirements applicable under plans in effect under this part for major stationary sources of PM-10 shall also apply to major stationary sources of PM-10 precursors, except where the Administrator determines that such sources do not contribute significantly to PM-10 levels which exceed the standard in the area. The Administrator shall issue guidelines regarding the application of the preceding sentence.

SEC. 190. ISSUANCE OF RACM AND BACM GUIDANCE.

The Administrator shall issue, in the same manner and according to the same procedure as guidance is issued under section 108(c), technical guidance on reasonably available control measures and best available control measures for urban fugitive dust, and emissions from residential wood combustion (including curtailments and exemptions from such curtailments) and prescribed silvicultural and agricultural burning, no later than 18 months following the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall also examine other categories of sources contributing to nonattainment of the PM-10 standard, and determine whether additional guidance on reasonably available control measures and best available control measures is needed, and issue any such guidance no later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990.

SUBPART 5—ADDITIONAL PROVISIONS FOR AREAS DESIGNATED NONATTAINMENT FOR SULFUR OXIDES, NITROGEN DIOXIDE, OR LEAD

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 191. PLAN SUBMISSION DEADLINES.

(a) Submission.—Any State containing an area designated or redesignated under section 107(d) as nonattainment with respect to the national primary ambient air quality standards for sulfur oxides, nitrogen dioxide, or lead subsequent to the date of the enactment of the Clean Air Act Amendments of 1990 shall submit to the Administrator, within 18 months of the designation, an applicable implementation plan meeting the requirements of this part.

(b) States Lacking Fully Approved State Implementation Plans.—Any State containing an area designated nonattainment with respect to national primary ambient air quality standards for sulfur oxides or nitrogen dioxide under section 107(d)(1)(C)(i), but lacking a fully approved implementation plan complying with the requirements of this Act (including part D) as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990, shall submit to the Administrator, within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990, an implementation plan meeting the requirements of subpart 1 (except as otherwise prescribed by section 192).

SEC. 192. ATTAINMENT DATES.

(a) Plans Under Section 191(a).—Implementation plans required under section 191(a) shall provide for attainment of the relevant primary standard as expeditiously as practicable but no later than 5 years from the date of the nonattainment designation.

(b) Plans Under Section 191(b).—Implementation plans required under section 191(b) shall provide for attainment of the relevant primary national ambient air quality standard within 5 years after the date of the enactment of the Clean Air Act Amendments of 1990.

(c) Inadequate Plans.—Implementation plans for nonattainment areas for sulfur oxides or nitrogen dioxide with plans that were approved by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990 but, subsequent to such approval, were found by the Administrator to be substantially inadequate, shall provide for attainment of the relevant primary standard within 5 years from the date of such finding.

SEC. 193. GENERAL SAVINGS CLAUSE.

Each regulation, standard, rule, notice, order and guidance promulgated or issued by the Administrator under this Act, as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect according to its terms, except to the extent otherwise provided under this Act, inconsistent with any provision of this Act, or revised by the Administrator. No control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before the date of the enactment of the Clean Air Act Amendments of 1990 in any area which is a nonattainment area for any air pollutant may be modified after such enactment in any manner unless the modification insures equivalent or greater emission reductions of such air pollutant.

SEC. 194. AIR POLLUTANT RELEASE INVESTIGATION BOARD.

(a) Establishment.—There is established within the Environmental Protection Agency an Air Pollutant Accidental Release Investigation Board to be appointed by the Administrator for the purpose of investigating major life-threatening releases of air pollutants. The Board shall consist of 3 members which serve at the pleasure of the Administrator. The Board shall establish reasonable rules of procedure.

(b) Membership.—The Board shall establish panels to investigate such releases. Any panel of the Board shall consist of 4 employees of the United States Environmental Protection Agency and the Secretary of Labor selected jointly by the Administrator and the Secretary of Labor at the request of the Board. With the consent of the head of any other Federal agency, the Administrator may also select an employee of such agency as a member of a panel in place of an employee of the Environmental Protection Agency.

(c) Duties.—(1) The Board shall investigate or cause to be investigated (in such detail as it shall prescribe), and independently determine the facts, conditions, and circumstances and the cause or probable cause or causes of, any major life-threatening release of an air pollutant, except:

(A) any release of source, byproduct, or special nuclear material from a nuclear incident which the Nuclear Regulatory Commission is authorized to investigate, and

(B) any transportation-related release, including marine oil spills, which the National Transportation Safety Board (NTSB) is authorized to investigate.

The Board should utilize the expertise and experience of other agencies, including the NTSB.

(2) For any investigation performed under paragraph (1) of this subsection, the Board shall develop a written report on the facts, conditions, and circumstances of the release and include appropriate recommendations and shall make such reports available to the Administrator, the Secretary of Labor, and Congress and available to the public. No proposed or final report of the Board shall be subject to review of the Administrator or any agency or to judicial review in any court.

(d) Powers.—(1) The Board, or upon the authority of the Board, any member thereof, may, for the purpose of carrying out subsection (c), hold such hearings, sit and act at such times and places, and administer such oaths, as the Board or such officer or employee deems advisable.

(2) In addition to that described in paragraph (1), the Board may use any information gathering authority of the Administrator under this Act, including the subpoena power provided in section 307(a)(1) of this Act.

(e) Evidence.—No part of the conclusions, findings, or recommendations of any report of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages in which the United States is a party arising out of any matter mentioned in such report.

* * * * *

TITLE II—EMISSION STANDARDS FOR MOVING SOURCES

* * * * *

Part A—Motor Vehicle Emission and Fuel Standards

establishment of standards

Sec. 202. (a) Except as otherwise provided in subsection (b)—

(1)***

* * * * *

(3)[(A)(i) The Administrator shall prescribe regulations under paragraph (1) of this subsection applicable to emissions of carbon monoxide, hydrocarbons, and oxides of nitrogen from classes or categories of heavy-duty vehicles or engines

manufactured during and after model year 1979. Such regulations applicable to such pollutants from such classes or categories of vehicles or engines manufactured during model years 1979 through 1982 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to the cost of applying such technology within the period of time available to manufacturers and to noise, energy, and safety factors associated with the application of such technology.

[(ii) Unless a different standard is temporarily promulgated as provided in subparagraph (B) or unless the standard is changed as provided in subparagraph (E), regulations under paragraph (1) of this subsection applicable to emissions from vehicles or engines manufactured during and after model year—

[(I) 1983, in the case of hydrocarbons and carbon monoxide, shall contain standards which require a reduction of at least 90 percent, and

[(II) 1985, in the case of oxides of nitrogen, shall contain standards which require a reduction of at least 75 percent,

from the average of the actually measured emissions from heavy-duty gasoline-fueled vehicles or engines, or any class or category thereof, manufactured during the baseline model year.

[(iii) The Administrator shall prescribe regulations under paragraph (1) of this subsection applicable to emissions of particulate matter from classes or categories of vehicles manufactured during and after model year 1981 (or during any earlier model year, if practicable). Such regulations shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to the cost of applying such technology within the period of time available to manufacturers and to noise, energy, and safety factors associated with the application of such technology. Such standards shall be promulgated and shall take effect as expeditiously as practicable taking into account the period necessary for compliance.

[(iv) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, or such other factors as may be appropriate.

[(v) For the purpose of this paragraph, the term “baseline model year” means, with respect to any pollutant emitted from any vehicle or engine, or class or category thereof, the model year immediately preceding the model year in which Federal standards applicable to such vehicle or engine, or class or category thereof, first applied with respect to such pollutant.

[(B) During the period of June 1 through December 31, 1978, in the case of hydrocarbons and carbon monoxide, or during the period of June 1 through December 31, 1980, in the case of oxides of nitrogen, and during each period of June 1 through December 31 of each third year thereafter, the Administrator may, after notice and opportunity for a public hearing promulgate regulations revising any standard prescribed as provided in subparagraph (A)(ii) for any class or category of heavy-duty vehicles or engines. Such standard shall apply only for the period of three model years beginning four model years after the model year in which such revised standard is promulgated. In revising any standard under this subparagraph for any such three model year period, the Administrator shall determine the maximum degree of emission reduction which can be achieved by means reasonably expected to be available for production of such period and shall prescribe a revised emission standard in accordance with such determination. Such revised standard shall require a reduction of emissions from any standard which applies in the previous model year.

[(C) Action revising any standard for any period may be taken by the Administrator under subparagraph (B) only if he finds—

[(i) that compliance with the emission standards otherwise applicable for such model year cannot be achieved by technology, processes, operating methods, or other alternatives reasonably expected to be available for production for such model year without increasing cost or decreasing fuel economy to an excessive and unreasonable degree; and

[(ii) the National Academy of Sciences has not, pursuant to its study and investigation under subsection (c) issued a report substantially contrary to the findings of the Administrator under clause (i).

[(D) A report shall be made to the Congress with respect to any standard revised under subparagraph (B) which shall contain—

[(i) a summary of the health effects found, or believed to be associated with, the pollutant covered by such standard,

[(ii) an analysis of the cost-effectiveness of other strategies for attaining and maintaining national ambient air quality standards and carrying out regulations under part C of title I (relating to significant deterioration) in relation to the cost-effectiveness for such purposes of standards which, but for such revision, would apply,

[(iii) a summary of the research and development efforts and progress being made by each manufacturer for purposes of meeting the standards promulgated as provided in subparagraph (A)(ii) or, if applicable, subparagraph (E), and

[(iv) specific findings as to the relative costs of compliance, and relative fuel economy, which may be expected to result from the application for any model year of such revised standard and the application for such model year of the standard, which, but for such revisions, would apply.

[(E)(i) The Administrator shall conduct a continuing pollutant specific study concerning the effects of each air pollutant emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare. The results of such study shall be published in the Federal Register and reported to the Congress not later than June 1, 1978, in the case of hydrocarbons and carbon monoxide, and June 1, 1980, in the case of oxides of nitrogen, and before June 1 of each third year thereafter.

[(ii) On the basis of such study and such other information as available to him (including the studies under section 214), the Administrator may, after notice and opportunity for a public hearing, promulgate regulations under paragraph (1) of this subsection changing any standard prescribed in subparagraph (A)(ii) (or revised under subparagraph (B) or previously changed under this subparagraph). No such changed standard shall apply for any model year before the model year four years after the model year during which regulations containing such changed standard are promulgated.]

(A)(i) Unless the standard is changed as provided in subparagraph (B), regulations under paragraph (1) of this subsection applicable to emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter from classes and categories of heavy-duty vehicles or engines manufactured during or after model year 1983 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.

(ii) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, or other appropriate factors.

(B) On the basis of information available to the Administrator concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare, and taking costs into account, the Administrator may promulgate regulations under paragraph (1) of this subsection revising any

standard promulgated under or before the date of the enactment of the Clean Air Act Amendments of 1990 (or previously revised under this subparagraph).

[(F)] (C) For purposes of this paragraph, motorcycles and motorcycle engines shall be treated in the same manner as heavy-duty vehicles and engines (except as otherwise permitted under section 206(f)(1)) unless the Administrator promulgates a rule reclassifying motorcycles as light-duty vehicles within the meaning of this section or unless the Administrator promulgates regulations under subsection (a) applying standards applicable to the emission of air pollutants from motorcycles as a separate class or category. In any case in which such standards are promulgated for such emissions from motorcycles as a separate class or category, the Administrator, in promulgating such standards, shall consider the need to achieve equivalency of emission reductions between motorcycles and other motor vehicles to the maximum extent practicable.

(D) The Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to him, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emissions from any rebuilt heavy-duty engines (whether or not the engine is past its statutory useful life), which in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare taking costs into account. Any regulation shall take effect after a period the Administrator finds necessary to permit the development and application of the requisite control measures, giving appropriate consideration to the cost of compliance within the period and energy and safety factors.

* * * * *

(4)(A) Effective with respect to vehicles and engines manufactured after model year 1978, no emission control device, system, or element of design shall be used in a new motor vehicle or new motor vehicle engine for purposes of complying with [standards prescribed under this subsection] requirements prescribed under this title if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(B) In determining whether an unreasonable risk exists under subparagraph (A), the Administrator shall consider, among other factors, (i) whether and to what extent the use of any device, system, or element of design causes, increases, reduces, or eliminates emissions of any unregulated pollutants; (ii) available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such device, system, or element of design, and (iii) the availability of other devices, systems, or elements of design which may be used to conform to [standards prescribed under this subsection] requirements prescribed under this title without causing or contributing to such unreasonable risk. The Administrator shall include in the consideration required by this paragraph all relevant information developed pursuant to section 214.

* * * * *

[(6) The Administrator shall determine the feasibility and desirability of requiring new motor vehicles to utilize onboard hydrocarbon control technology which would avoid the necessity of gasoline vapor recovery of uncontrolled emissions emanating from the fueling of motor vehicles. The Administrator shall compare the costs and effectiveness of such technology to that of implementing and maintaining vapor recovery systems (taking into consideration such factors as fuel economy, economic costs of such technology, administrative burdens, and equitable distribution of costs). If the Administrator finds that it is feasible and desirable to employ such technology, he shall, after consultation with the Secretary of Transportation with respect to motor vehicle safety, prescribe, by regulation, standards requiring the use of onboard hydrocarbon technology which shall not become effective until the introduction to the model year for which it would be feasible to implement such standards, taking into consideration compliance costs and the restraints of an adequate lead time for design and production.]

(6) Onboard vapor recovery.—Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards under this section requiring that all new light-duty motor vehicles manufactured in the third model year after the model year in which the standards are promulgated and thereafter shall be equipped with vehicle-based (“onboard”) systems for the control of evaporative emissions during vehicle refueling. The Administrator shall determine, in consultation with the Secretary of Transportation, that such systems are safe. The standards shall require that

such systems provide a minimum evaporative emission capture efficiency of 95 percent. The requirements of section 182(b)(3) (relating to stage II gasoline vapor recovery) for areas classified under section 181 as moderate for ozone shall not apply after promulgation of such standards and the Administrator may revise or waive the application of the requirements of such section 182(b)(3) for areas classified under section 181 as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems required under this paragraph are in widespread use throughout the motor vehicle fleet.

(b)(1)(A)***

* * * * *

[(C) Effective with respect to vehicles and engines manufactured after model year 1978 (or in the case of heavy-duty vehicles or engines, such later model year as the Administrator determines is the earliest feasible model year), the test procedure promulgated under paragraph (2) for measurement of evaporative emissions of hydrocarbons shall require that such emissions be measured from the vehicle or engine as a whole. Regulations to carry out this subparagraph shall be promulgated not later than two hundred and seventy days after date of enactment of this subparagraph.]

(C) The Administrator may promulgate regulations under subsection (a)(1) revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account. Any revised standard shall require a reduction of emissions from the standard that was previously applicable. Any such revision under this title may provide for a phase-in of the standard.

[(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to the date of enactment of the Clean Air Amendments of 1970), shall be prescribed by regulation within 180 days after such date.]

(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to the date of the enactment of the Clean Air Act Amendments of 1990), shall be promulgated by regulation within 180 days after such date.

[(3) For purposes of this part—

[(A)(i) The term “model year” with reference to any specific calendar year means the manufacturer’s annual production period (as determined by the Administrator) which includes January 1 of such calendar year. If the manufacturer has no annual production period, the term “model year” shall mean the calendar year.

[(ii) For the purpose of assuring that vehicles and engines manufactured before the beginning of a model year were not manufactured for purposes of circumventing the effective date of a standard required to be prescribed by subsection (b), the Administrator may prescribe regulations defining “model year” otherwise than as provided in clause (i).

[(B) The term “light duty vehicles and engines” means new light duty motor vehicles and new light duty motor vehicle engines, as determined under regulations of the Administrator.

[(C) The term “heavy duty vehicle” means a truck, bus, or other vehicle manufactured primarily for use on the public streets, roads, and highways (not including any vehicle operated exclusively on a rail or rails) which has a gross vehicle weight (as determined under regulations promulgated by the Administrator) in excess of six thousand pounds. Such term includes any such vehicle which has special features enabling off-street or off-highway operation and use.

[(4) On July 1 of 1971, and of each year thereafter, the Administrator shall report to the Congress with respect to the development of systems necessary to implement the emission standards established pursuant to this section. Such reports shall

include information regarding the continuing effects of such air pollutants subject to standards under this section on the public health and welfare, the extent and progress of efforts being made to develop the necessary systems, the costs associated with development and application of such systems, and following such hearings as he may deem advisable, any recommendations for additional congressional action necessary to achieve the purposes of this Act. In gathering information for the purposes of this paragraph and in connection with any hearing, the provisions of section 307(a) (relating to subpoenas) shall apply.

[(5)(A) At any time after August 31, 1978, any manufacturer may file an application requesting the waiver for model years 1981 and 1982 of the effective date of the emission standard required by paragraph (1)(A) for carbon monoxide applicable to any model (as determined by the Administration) of light-duty motor vehicles and engines manufactured in such model years. The Administrator shall make his determination with respect to any such application within sixty days after such application is filed with respect to such model. If he determines, in accordance with the provisions of this paragraph, that such waiver should be granted, he shall simultaneously with such determination prescribe by regulation emission standards which shall apply (in lieu of the standards required to be prescribed by paragraph (1)(A) of this subsection) to emissions of carbon monoxide from such model of vehicles or engines manufactured during model years 1981 and 1982.

[(B) Any standards prescribed under this paragraph shall not permit emissions of carbon monoxide from vehicles and engines to which such waiver applies to exceed 7.0 grams per vehicle per mile.

[(C) Within sixty days after receipt of the application for any such waiver and after public hearing, the Administrator shall issue a decision granting or refusing such waiver. The Administrator may grant such waiver if he finds that protection of the public health does not require attainment of such 90 percent reduction for carbon monoxide for the model years to which such waiver applies in the case of such vehicles and engines and if he determines that—

[(i) such waiver is essential to the public interest or the public health and welfare of the United States;

[(ii) all good faith efforts have been made to meet the standards established by this subsection;

[(iii) the applicant has established that effective control technology, processes, operating methods, or other alternatives are not available or have not been available with respect to the model in question for a sufficient period of time to achieve compliance prior to the effective date of such standards, taking into consideration costs, driveability, and fuel economy; and

[(iv) studies and investigations of the National Academy of Sciences conducted pursuant to subsection (c) and other information available to him has not indicated that technology, processes, or other alternatives are available (within the meaning of clause (iii)) to meet such standards.

[(6)(A)] (3) Upon the petition of any manufacturer, the Administrator, after notice and opportunity for public hearing, may waive the standard required under subparagraph (B) of paragraph (1) to not exceed 1.5 grams of oxides of nitrogen per vehicle mile for any class or category of light-duty vehicles or engines manufactured by such manufacturer during any period of up to four model years beginning after the model year 1980 if the manufacturer demonstrates that such waiver is necessary to permit the use of an innovative power train technology, or innovative emission control device or system, in such class or category of vehicles or engines and that such technology or system was not utilized by more than 1 percent of the light-duty vehicles sold in the United States in the 1975 model year. Such waiver may be granted only if the Administrator determines—

[(i)] (A) that such waiver would not endanger public health,

[(ii)] (B) that there is a substantial likelihood that the vehicles or engines will be able to comply with the applicable standard under this section at the expiration of the waiver, and

[(iii)] (C) that the technology or system has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under the Energy Policy and Conservation Act upon the expiration of the waiver.

No waiver under this subparagraph granted to any manufacturer shall apply to more than 5 percent of such manufacturer's production or more than fifty thousand vehicles or engines, whichever is greater.

[(B) Upon the petition of any manufacturer, the Administrator, after notice and opportunity for public hearing, may waive the standard required under subparagraph (B) of paragraph (1) to not to exceed 1.5 grams of oxides of nitrogen per vehicle mile for any class or category of light-duty vehicles and engines manufactured by such manufacturer during the four model year period beginning with the model year 1981 if the manufacturer can show that such waiver is necessary to permit the use of diesel engine technology in such class or category of vehicles or engines. Such waiver may be granted if the Administrator determines—

[(i) that such waiver will not endanger public health,

[(ii) that such waiver will result in significant fuel savings at least equal to the fuel economy standard applicable in each year under the Energy Policy and Conservation Act, and

[(iii) that the technology has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under the Energy Policy and Conservation Act at the expiration of the waiver.

[(7) The Congress hereby declares and establishes as a research objective, the development of propulsion systems and emission control technology to achieve standards which represent a reduction of at least 90 per centum from the average emissions of oxides of nitrogen actually measured from light-duty motor vehicles manufactured in model year 1971 not subject to any Federal or State emission standard for oxides of nitrogen. The Administrator shall, by regulations promulgated within one hundred and eighty days after enactment of the Clean Air Act Amendments of 1977, require each manufacturer whose sales represent at least 0.5 per centum of light-duty motor vehicle sales in the United States, to build and, on a regular basis, demonstrate the operation of light-duty motor vehicles that meet this research objective, in addition to any other applicable standards or requirements for other pollutants under this Act. Such demonstration vehicles shall be submitted to the Administrator no later than model year 1979 and in each model year thereafter. Such demonstration shall, in accordance with applicable regulations, to the greatest extent possible, (A) be designed to encourage the development of new powerplant and emission control technologies that are fuel efficient, (B) assure that the demonstration vehicles are or could reasonably be expected to be within the productive capability of the manufacturers, and (C) assure the utilization of optimum engine, fuel, and emission control systems.]

* * * * *

(d) The Administrator shall prescribe regulations under which the useful life of vehicles and engines shall be determined for purposes of subsection (a)(1) of this section and section 207. Such regulations shall provide that useful life shall—

(1) in the case of light duty vehicles and light duty vehicle engines, be a period of use of five years or of fifty thousand miles (or the equivalent), whichever first occurs, except as otherwise specifically provided in this title;

* * * * *

(g) NMHC and CO Standards for Model Years After 1993.—Effective with respect to the model year 1994 and thereafter, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC) and carbon monoxide (CO) from passenger cars and light-duty trucks (LDTs) shall contain standards which provide that emissions from a specified percentage of each manufacturer's sales volume of such cars and trucks shall comply with the levels specified in table 1. The specified percentage shall be 40 percent in model year 1994, 80 percent in 1995, and 100 percent thereafter.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(h) NO₅x and PM Standards for Model Years After 1993.—Effective with respect to the model years after 1993 in the case of passenger cars, and effective with respect to model years after 1994 in the case of light-duty trucks (LTDs), the regulations under subsection (a) applicable to emissions of oxides of nitrogen (NO₅x) AND PARTICULATE MATTER (PM) FROM SUCH CARS AND TRUCKS SHALL CONTAIN STANDARDS WHICH PROVIDE THAT SUCH EMISSIONS FROM A SPECIFIED PERCENTAGE OF EACH MANUFACTURER'S SALES VOLUME OF SUCH CARS AND TRUCKS SHALL COMPLY WITH THE LEVELS SPECIFIED IN TABLE 2. IN THE CASE OF PASSENGER CARS, THE SPECIFIED PERCENTAGE SHALL BE 40 PERCENT IN MODEL YEAR 1994 AND 100 PERCENT THEREAFTER. IN THE CASE OF LIGHT-DUTY TRUCKS, THE SPECIFIED PERCENTAGE SHALL BE 40 PERCENT IN MODEL YEAR 1995 AND 100 PERCENT THEREAFTER.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(i) Phase II Study.—(1) The Administrator, with the participation of the Office of Technology Assessment, shall study whether or not further reductions in emissions from passenger cars and light-duty trucks should be required pursuant to this title. The study shall consider whether to establish with respect to model years commencing after January 1, 2003, the standards and useful life period for gasoline and diesel-fueled passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less specified in the following table:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Such study shall also consider other standards and useful life periods which are more stringent or less stringent than those set forth in table 3 (but more stringent than those referred to in subsections (g) and (h)).

(2)(A) As part of the study under paragraph (1), the Administrator shall examine the need for further reductions in emissions in order to attain or maintain the national ambient air quality standards, taking into consideration the waiver provisions of section 209(b). As part of such study, the Administrator shall also examine—

(i) the availability of technology (including the costs thereof), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for meeting more stringent emission standards than those provided in subsections (g) and (h) for model years commencing not earlier than after January 1, 2003 and not later than model year 2006, including the lead time and safety and energy impacts of meeting more stringent emission standards; and

(ii) the need for, and cost effectiveness of, obtaining further reductions in emissions from such passenger cars and light-duty trucks, taking into consideration alternative means of attaining or maintaining the national primary ambient air quality standards pursuant to State implementation plans and other requirements of this Act, including their feasibility and cost effectiveness.

(B) The Administrator shall submit a report to Congress no later than June 1, 1997, containing the results of the study under this subsection, including the results of the examination conducted under subparagraph (A). Before submittal of such report the Administrator shall provide a reasonable opportunity for public comment and shall include a summary of such comments in the report to Congress.

(3)(A) Based on the study under paragraph (1) the Administrator shall determine, by rule, within 3 calendar years after the report is submitted to Congress, but not later than December 31, 1999, whether—

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years

commencing not earlier than January 1, 2003 and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

The rulemaking under this paragraph shall commence within 3 months after submission of the report to Congress under paragraph (2)(B).

(B) If the Administrator determines under subparagraph (A) that—

(i) there is no need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); or

(iii) obtaining further reductions in emissions from such vehicles will not be needed or cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall not promulgate more stringent standards than those in effect pursuant to subsections (g) and (h). (Nothing in this paragraph shall prohibit the Administrator from exercising the Administrator's authority under subsection (a) to promulgate more stringent standards for passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less at any other time thereafter in accordance with subsection (a).)

(C) If the Administrator determines under subparagraph (A) that—

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of passenger cars and light-duty trucks with a loaded vehicle weight (lvw) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall either promulgate the standards (and useful life periods) set forth in table 3 of paragraph (1) or promulgate alternative standards (and useful life periods) which are more stringent than those referred to in subsections (g) and (h). Any such standards (or useful life periods) promulgated by the Administrator shall take effect with respect to any such vehicles or engines no earlier than the model year 2003 but not later than model year 2006, as determined by the Administrator in the rule.

(D) Nothing in this paragraph shall be construed by the Administrator or by a court as a presumption that any standards (or useful life period) set forth in table 3 shall be promulgated in the rulemaking required under this paragraph. The action required of the Administrator in accordance with this paragraph shall be treated as a nondiscretionary duty for purposes of section 304(a)(2) (relating to citizen suits).

(E) Unless the Administrator determines not to promulgate more stringent standards as provided in subparagraph (B) or to postpone the effective date of standards referred to in table 3 of paragraph (1) or to establish alternative standards as provided in subparagraph (C), effective with respect to model years commencing after January 1, 2003, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), oxides of nitrogen (NO_x), and carbon monoxide (CO) from motor vehicles and motor vehicle engines in the classes specified in table 3 of paragraph (1) above shall contain standards which provide that emissions may not exceed the pending emission levels specified in table 3 of paragraph (1).

(j) Cold CO Standard.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations under subsection (a) of this section applicable to emissions of carbon monoxide from 1993 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit. The regulations shall contain standards which provide that emissions of carbon monoxide from a manufacturer's vehicles when operated at 20 degrees Fahrenheit may not exceed, in the case of light-duty vehicles, 10.0 grams per mile, and in the case of light-duty trucks, a level comparable in stringency to the standard applicable to light-duty vehicles. The standards also shall provide that each manufacturer's light-duty vehicle and light-duty truck fleets shall comply with applicable standards according to the following schedule: at least 40 percent of 1993 model year vehicles shall comply with applicable standards; at least 80 percent of 1994 model year vehicles shall comply with applicable standards; and 100 percent of 1995 and later model year vehicles shall comply with applicable standards.

(2)(A) Not later than December 31, 1993, the Administrator shall complete a study assessing the need for further reductions in emissions of carbon monoxide and the maximum reductions in such emissions achievable from 1998 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit.

(B) The Administrator may promulgate (and from time to time revise) regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from 1998 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit, as needed to protect public health and welfare, taking costs into account.

(3) The Administrator also may promulgate regulations under subsection (a)(1) applicable to emissions of carbon monoxide from heavy-duty vehicles and engines when operated at cold temperatures.

(k) Control of Evaporative Emissions.—The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles—

(1) during operation; and

(2) over 2 or more days of nonuse;

under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility, and to cost, energy, and safety factors associated with the application of the appropriate technology. The Administrator shall commence a rulemaking under this subsection within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990. If final regulations are not promulgated under this subsection within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this Act. Such date certain shall not be later than 15 months after the expiration of such 18 month deadline.

(l) Mobile Source-Related Air Toxics.—

(1) Study.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall complete a study of the need for, and feasibility of, controlling emissions of toxic air pollutants which are unregulated under this Act and associated with motor vehicles and motor vehicle fuels, and the need for, and feasibility of, controlling such emissions and the means and measures for such controls. The study shall focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain, including emissions of benzene, formaldehyde, and 1, 3 butadiene. The proposed report shall be available for public review and comment and shall include a summary of all comments.

(2) Standards.—Within 54 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, based on the study under paragraph (1), promulgate (and from time to time revise) regulations under subsection (a)(1) or section 211(c)(1) containing reasonable requirements to control hazardous air pollutants from motor vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a), the availability and costs of the technology, and noise, energy, and safety factors, and lead time. Such regulations shall not be inconsistent with standards under section 202(a). The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.

(m) Emissions Control Diagnostics.—

(1) Rulemaking.—The Administrator, after consideration of environmental benefits, technology, safety, and economic factors, shall promulgate (and from time to time revise) regulations requiring manufacturers to install on all new motor vehicles and motor vehicle engine diagnostics systems capable of—

(A) accurately identifying, to the extent practicable, emission-related systems deterioration or malfunction which could cause or result in failure of the vehicle to comply with emission standards established under this section,

(B) alerting the vehicle's owner or operator to the likely need for emission-related components or systems maintenance or repair,

(C) storing and retrieving fault codes specified by the Administrator, and

(D) providing access to stored information in a manner specified by the Administrator.

(2) Effective date.—The regulations prescribing emission control diagnostics systems under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period and energy and safety factors.

(3) State inspection.—The Administrator, by regulation, may require States that have implementation plans under section 110 containing motor vehicle inspection and maintenance programs to amend their plans within 2 years of promulgation of the regulations to provide for inspection of emission control diagnostics systems (as prescribed by regulations under paragraph (1) of this subsection) and the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems.

(4) Emissions control diagnostics.—The Administrator shall, by regulation, require manufacturers—

(A) to provide standardized connectors through which the emission control diagnostics system is accessed for inspection, diagnosis, service, or repair on all motor vehicles and motor vehicle engines;

(B) to provide standardized access to the emission control diagnostics system through such connectors which shall be unrestricted and shall not require any access code or any device which is only available from a vehicle manufacturer; and

(C) to provide standardized output of the data from the emission control diagnostics system through such connectors to a scanning device which shall be usable without the need for any unique decoding information or device.

(5) Information availability.—The Administrator, by regulation, shall require (subject to the provisions of section 208(c) regarding the protection of methods or processes entitled to protection as trade secrets) manufacturers, including motor vehicle or motor vehicle engine manufacturers, to make available in a timely manner, under reasonable terms and conditions to any person engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines any information reasonably necessary to utilize fully the emission control diagnostic system and to make effective emissions related repairs and service. No such information may be withheld under section 208(c) if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines. Such information shall also be available to the Administrator, subject to section 208(c), in carrying out the Administrator's responsibilities under this section.

(6) Review of data.—The Administrator may, in promulgating regulations under this section, review data output from emission control diagnostic systems and revise such regulations to improve the emissions repair effectiveness by use of such data. In the review process, the Administrator should consult with the industry, including vehicle manufacturers, parts manufacturers, diagnostic equipment manufacturers, and motor vehicle repair service providers, regarding the quality and usefulness of the data provided by the emission control diagnostic system, technology developments in motor vehicle emission control diagnostics, and any other matters that would lead to improving the effectiveness of emission control systems repairs and maintenance.

(7) Brand, corporate, and trade names.—The Administrator, in promulgating regulations under this subsection, shall require that information and data from the emissions control diagnostics systems not require the use of any component or service which is identified by brand, trade, or corporate name, as provided by subparagraphs (A) and (B) of section 207(c)(3).

(8) Rulemaking.—The Administrator shall commence a rulemaking under this subsection within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990. If the final regulations under this subsection are not promulgated within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this Act. Such date certain shall not be later than 15 months after such 18-month deadline.

PROHIBITED ACTS

Sec. 203. (a) The following acts and the causing thereof are prohibited—

(1)***

[(2) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information, required under section 208 or for any person to fail or refuse to permit entry, testing, or inspection authorized under section 206(c);

[(3)(A) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title prior to its sale and delivery to the ultimate purchaser, or for any manufacturer or dealer knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser; or

[(B) for any person engaged in the business of repairing, servicing, selling, leasing, or trading motor vehicles or motor vehicle engines, or who operates a fleet of motor vehicles, knowingly to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title following its sale and delivery to the ultimate purchaser; or]

(2)(A) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under section 208;

(B) for any person to fail or refuse to permit entry, testing or inspection authorized under section 206(c) or section 208;

(C) for any person to fail or refuse to perform tests, or have tests performed as required under section 207(c) or section 208;

(3)(A) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser; or

(B) for any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use; or

* * * * *

No action with respect to any element of design referred to in paragraph (3) (including any adjustment or alteration of such element) shall be treated as a prohibited act under such paragraph (3) if such action is in accordance with section 215. Nothing in paragraph (3) shall be construed to require the use of manufacturer parts in maintaining or repairing any motor vehicle or motor vehicle engine. For the purposes of the preceding sentence, the term "manufacturer parts" means, with respect to a motor vehicle engine, parts produced or sold by the manufacturer of the motor vehicle or motor vehicle engine. No action with respect to any device or element of design referred to in paragraph (3) shall be treated as a prohibited act under that paragraph if (i) the action is for the purpose of repair or replacement of the device or element, or is a necessary and temporary procedure to repair or replace any other item and the device or element is replaced upon completion of the procedure, and (ii) such action thereafter results in the proper functioning of the device or element referred to in paragraph (3). No action with respect to any device or element of design referred to in paragraph (3) shall be treated as a prohibited act under that paragraph if the action is for the purpose of a conversion of a motor vehicle for use of a clean alternative fuel (as defined in this title) and if such vehicle complies with the applicable standard under section 202 when operating on such fuel, and if in the case of a clean alternative fuel vehicle (as defined by rule by the Administrator), the device or element is replaced upon completion of the conversion procedure and such action results in proper functioning of the device or element when the motor vehicle operates on conventional fuel.

* * * * *

[(c) Upon application therefor, the Administrator may exempt from section 203(a)(3) any vehicles (or class thereof) manufactured before the 1974 model year from section 203(a)(3) for the purpose of permitting modifications to the emission control device or system of such vehicle in order to use fuels other than those specified in certification testing under section 206(a)(1), if the Administrator, on the basis of information submitted by the applicant, finds that such modification will not result in such vehicle or engine not complying with standards under section 202 applicable to such vehicle or engine. Any such exemption shall identify (1) the vehicle or vehicles so exempted, (2) the specific nature of the modification, and (3) the person or class of persons to whom the exemption shall apply.]

[penalties]

[Sec. 205. Any person who violates paragraph (1), (2), or (4) of section 203(a) or any manufacturer, dealer, or other person who violates paragraph (3)(A) of section 203(a) shall be subject to a civil penalty of not more than \$10,000. Any person who violates paragraph (3)(B) of such section 203(a) shall be subject to a civil penalty of not more than \$2,500. Any such violation with respect to paragraph (1), (3), or (4) of section 203(a) shall constitute a separate offense with respect to each motor vehicle or motor vehicle engine.]

SEC. 205. CIVIL PENALTIES.

(a) Violations.—Any person who violates sections 203(a)(1) or 203(a)(4), any manufacturer or dealer who violates section 203(a)(3)(A), or any person who violates regulations prescribed under sections 212 (a), (b), (f), or (i) shall be subject to a civil penalty of not more than \$25,000. Any person other than a manufacturer or dealer who violates section 203(a)(3)(A) or any person who violates section 203(a)(3)(B) shall be subject to a civil penalty of not more than \$2,500. Any such violation with respect to paragraph (1), (3)(A), or (4) of section 203(a) shall constitute a separate offense with respect to each motor vehicle or motor vehicle engine. Any such violation with respect to section 203(a)(3)(B) shall constitute a separate offense with respect to each part or component. Any person who violates section 203(a)(2), or regulations prescribed under section 212(c), shall be subject to a civil penalty of not more than \$25,000 per day of violation.

(b) Civil Actions.—The Administrator may commence a civil action to assess and recover any civil penalty under subsection (a) of this section, section 211(d), or section 213(d). Any action under this subsection may be brought in the district court of the United States for the district in which the violation is alleged to have occurred or in which the defendant resides or has the Administrator's principal place of business, and the court shall have jurisdiction to assess a civil penalty. In determining the amount of any civil penalty to be assessed under this subsection, the court shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with this title, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

(c) Administrative Assessment of Certain Penalties.—4

(1) Administrative penalty authority.—In lieu of commencing a civil action under subsection (b), the Administrator may assess any civil penalty prescribed in subsection (a) of this section, section 211(d), or section 213(d), except that the maximum amount of penalty sought against each violator in a penalty assessment proceeding shall not exceed \$200,000, unless the Administrator and the Attorney General jointly determine that a matter involving a larger penalty amount is appropriate for administrative penalty assessment. Any such determination by the Administrator and the Attorney General shall not be subject to judicial review. Assessment of a civil penalty under this subsection shall be by an order made on the record after opportunity for a hearing in accordance with sections 554 and 556 of title 5 of the United States Code. The Administrator shall issue reasonable rules for discovery and other procedures for hearings under this paragraph. Before issuing such an order, the Administrator shall give written notice to the person to be assessed an administrative penalty of the Administrator's proposal to issue such order and provide such person an opportunity to request such a hearing on the order, within 30 days of the date the notice is received by such person. The Administrator may compromise, or remit, with or without conditions, any administrative penalty which may be imposed under this section.

(2) Determining amount.—In determining the amount of any civil penalty assessed under this subsection, the Administrator shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with this title, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

(3) Effect of administrator's action.—(A) Action by the Administrator under this subsection shall not affect or limit the Administrator's authority to enforce any provision of this Act; except that any violation,

(i) with respect to which the Administrator has commenced and is diligently prosecuting an action under this subsection, or

(ii) for which the Administrator has issued a final order not subject to further judicial review and the violator has paid a penalty assessment under this subsection,

shall not be the subject of civil penalty action under subsection (b).

(B) No action by the Administrator under this subsection shall affect any person's obligation to comply with any section of this Act.

(4) Finality of order.—An order issued under this subsection shall become final 30 days after its issuance unless a petition for judicial review is filed under paragraph (5).

(5) Judicial review.—Any person against whom a civil penalty is assessed in accordance with this subsection may seek review of the assessment in the United States District Court for the District of Columbia, or for the district in which the violation is alleged to have occurred, in which such person resides, or where such person's principal place of business is located, within the 30-day period beginning on the date a civil penalty order is issued by simultaneously sending a copy of the filing by certified mail to the Administrator and the Attorney General. The Administrator shall file in the court a certified copy, or certified index, as appropriate, of the record on which the order was issued within 30 days. The court shall not set aside or remand any order issued in accordance with the requirements of this subsection unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Administrator's assessment of the penalty constitutes an abuse of discretion, and the court shall not impose additional civil penalties unless the Administrator's assessment of the penalty constitutes an abuse of discretion. In any proceedings, the United States may seek to recover civil penalties assessed under this section.

(6) Collection.—If any person fails to pay an assessment of a civil penalty imposed by the Administrator as provided in this subsection—

(A) after the order making the assessment has become final, or

(B) after a court in an action brought under paragraph (5) has entered a final judgment in favor of the Administrator,

the Administrator shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed (plus interest at rates established pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986 from the date of the final order or the date of the final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of the penalty shall not be subject to review. Any person who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in the first sentence of this paragraph shall be required to pay, in addition to that amount and interest, the United States' enforcement expenses, including attorneys fees and costs for collection proceedings, and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. The nonpayment penalty shall be in an amount equal to 10 percent of the aggregate amount of that person's penalties and nonpayment penalties which are unpaid as of the beginning of such quarter.

MOTOR VEHICLE AND MOTOR VEHICLE ENGINE COMPLIANCE TESTING AND CERTIFICATION

Sec. 206. (a)(1) The Administrator shall test, or require to be tested in such manner as he deems appropriate, any new motor vehicle or new motor vehicle engine submitted by a manufacturer to determine whether such vehicle or engine conforms with the regulations prescribed under section 202 of this Act. If such vehicle or engine conforms to such regulations, the Administrator shall issue a certificate of conformity upon such terms, and for such period (not in excess of one year) as he may prescribe. [In the case of any manufacturer of vehicles or vehicle engines whose projected sales in the United States for any model year (as determined by the Administrator) will not exceed three hundred, the regulations prescribed by the Administrator concerning testing by the manufacturer for purposes of determining compliance with regulations under section 202 for the useful life of the vehicle or engine shall not require operation of any vehicle or engine manufactured during such model year for more than five thousand miles or one hundred and sixty hours, respectively, but the Administrator shall apply such adjustment factors as he deems appropriate to assure that each such vehicle or engine will comply during its useful life (as determined under section 202(d)) with the regulations prescribed under section 202 of this Act.] In the case of any original equipment manufacturer (as defined by the Administrator in regulations promulgated before the date of the enactment of the Clean Air Act Amendments of 1990) of vehicles or vehicle engines whose projected sales in the United States for any model year (as determined by the Administrator) will not exceed 300, the Administrator shall not require, for purposes of determining compliance with regulations under section 202 for the useful life of the vehicle or engine, operation of any vehicle or engine manufactured during such model year for more than 5,000 miles or 160 hours, respectively, unless the Administrator by regulation prescribes otherwise. The Administrator shall apply any adjustment factors that the Administrator deems appropriate to assure that each vehicle or engine will comply during its useful life (as determined under section 202(d)) with the regulations prescribed under section 202.

* * * * *

(4)(A) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall revise the regulations promulgated under this subsection to add test procedures capable of determining whether 1993 and later model year light-duty vehicles and light-duty trucks, when properly maintained and used, will pass the inspection methods and procedures established under section 207(b) for that model year, under conditions reasonably likely to be encountered in the conduct of inspection and maintenance programs, but which those programs cannot reasonably influence or control. The conditions shall include fuel characteristics, ambient temperature, and short (30 minutes or less) waiting periods before tests are conducted. The Administrator shall not grant a certificate of conformity under this subsection for any 1993 or later model year vehicle or engine that the Administrator concludes cannot pass the test procedures established under this paragraph.

(B) From time to time, the Administrator may revise the regulations promulgated under subparagraph (A), as the Administrator deems appropriate.

* * * * *

(e) The Administrator shall [announce in the Federal Register and] make available to the public the results of his tests of any motor vehicle or motor vehicle engine submitted by a manufacturer under subsection (a) as promptly as possible after the enactment of the Clean Air Act Amendments of 1970 and at the beginning of each model year which begins thereafter. Such results shall be described in such nontechnical manner as will reasonably disclose to prospective ultimate purchasers of new motor vehicles and new motor vehicle engines the comparative performance of the vehicles and engines tested in meeting the standards prescribed under section 202 of this Act.

(f)[(1)] All light duty vehicles and engines and light-duty trucks manufactured during or after model year 1984 shall comply with the requirements of section 202 of this Act regardless of the altitude at which they are sold.

[(2) By October 1, 1978, the Administrator shall report to the Congress on the economic impact and technological feasibility of the requirements found in subparagraph (1) of this subsection. The report is also to evaluate the technological feasibility and the health consequences of separate proportional emission standards for light duty vehicles and engines in high altitude areas that would reflect a comparable percentage of reduction in emissions to that achieved by light duty vehicles and engines in low altitude areas.]

* * * * *

COMPLIANCE BY VEHICLES AND ENGINES IN ACTUAL USE

Sec. 207. (a)(1) Effective with respect to vehicles and engines manufactured in model years beginning more than 60 days after the date of the enactment of the Clean Air Amendments of 1970, the manufacturer of each new motor vehicle and new motor vehicle engine shall warrant to the ultimate purchaser and each subsequent purchaser that such vehicle or engine is (A) designed, built, and equipped so as to conform at the time of sale with applicable regulations under section 202, and (B) free from defects in materials and workmanship which cause such vehicle or engine to fail to conform with applicable regulations for its useful life (as determined under section 202(d)). In the case of vehicles and engines manufactured in the model year 1995 and thereafter such warranty shall require that the vehicle or engine is free from any such defects for the warranty period provided under subsection (i).

* * * * *

(3) The cost of any part, device, or component of any light-duty vehicle that is designed for emission control and which in the instructions issued pursuant to subsection (c)(3) of this section is scheduled for replacement during the useful life of the vehicle in order to maintain compliance with regulations under section 202 of this Act, the failure of which shall not interfere with the normal performance of the vehicle, and the expected retail price of which, including installation costs, is greater than 2 percent of the suggested retail price of such vehicle, shall be borne or reimbursed at the time of replacement by the vehicle manufacturer and such replacement shall be provided without cost to the ultimate purchaser, subsequent purchaser, or dealer. [The term "designed for emission control" as used in the preceding sentence means a catalytic converter, thermal reactor, or other component installed on or in a vehicle for the sole or primary purpose of reducing vehicle emissions (not including those vehicle components which were in general use prior to model year 1968 and the primary function of which is not related to emission control).] The term "designed for emission control" as used in the preceding sentence means a catalytic converter, a thermal reactor, an emission control diagnostics system, or other component installed on or in a vehicle for the sole or primary purpose of reducing vehicle emissions (not including those vehicle components which were in general use prior to model year 1968 and the primary function of which is not related to emission control).

(b) If the Administrator determines that (i) there are available testing methods and procedures to ascertain whether, when in actual use throughout its [useful life (as determined under section 202(d)) the warranty period (as determined under subsection (i)), each vehicle and engine to which regulations under section 202 apply complies with the emission standards of such regulations, (ii) such methods and procedures are in accordance with good engineering practices, and (iii) such methods and procedures are reasonably capable of being correlated with tests conducted under section 206(a)(1), then—

(1) he shall establish such methods and procedures by regulation, and

(2) at such time as he determines that inspection facilities or equipment are available for purposes of carrying out testing methods and procedures established under paragraph (1), he shall prescribe regulations which shall require manufacturers to warrant the emission control device or system of each new motor vehicle or new motor vehicle engine to which a regulation under section 202 applies and which is manufactured in a model year beginning after the Administrator first prescribes warranty regulations under this paragraph. The warranty under such regulations shall run to the ultimate purchaser and each subsequent purchaser and shall provide that if—

(A) the vehicle or engine is maintained and operated in accordance with instructions under subsection (c)(3),

(B) it fails to conform at any time during its [useful life (as determined under section 202(d)) the warranty period (as determined under subsection (i)) to the regulations prescribed under section 202, and

(C) such nonconformity results in the ultimate purchaser (or any subsequent purchaser) of such vehicle or engine having to bear any penalty or other sanction (including the denial of the right to use such vehicle or engine) under State or Federal law,

then such manufacturer shall remedy such nonconformity under such warranty with the cost thereof to be borne by the manufacturer. No such warranty shall be invalid on the basis of any part used in the maintenance or repair of a vehicle or engine if such part was certified as provided under subsection (a)(2). [For purposes of the warranty under this subsection, for the period after twenty-four months or twenty-four thousand miles (whichever first occurs) the term "emission control device or system" means a catalytic converter, thermal reactor, or other component installed on or in a vehicle for the sole or primary purpose of reducing vehicle emissions. Such terms shall not include those vehicle components which were in general use prior to model year 1968.]

(c) Effective with respect to vehicles and engines manufactured during model years beginning more than 60 days after the date of enactment of the Clean Air Amendments of 1970—

(1)***

* * * * *

(4) Intermediate in-use standards.—

(A) Model years 1994 and 1995.—For passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR) which are subject to standards under table 1 of section 202(g) in model years 1994 and 1995 (40 percent of the manufacturer's sales volume in model year 1994 and 80 percent in model year 1995), the standards applicable to NHMC and CO for purposes of this subsection shall be those set forth in table A in lieu of the standards for such air pollutants otherwise applicable under this title, except that any more stringent standards in effect for such purpose before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect until a more stringent standard takes effect as provided in paragraph (5).

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(B) Model years 1996 and 1997.—In the model years 1996 and 1997, passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR) which are not subject to final in-use standards under paragraph (5) (60 percent of the manufacturer's sales volume in model year 1996 and 20 percent in model year 1997) shall be subject to the standards for NHMC and CO for purposes of this subsection set forth in table A in lieu of those set forth in paragraph (5), except that any more stringent standards in effect for such purpose before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect until a more stringent standard takes effect as provided in paragraph (5).

(C) Useful life.—In the case of the in-use standards applicable under this paragraph for purposes of applying this subsection the applicable useful life shall be 5 years or 50,000 miles or the equivalent (whichever is less).

(5) Final in-use standards.—After the model year 1995, for purposes of applying this subsection, in the case of the percentage specified in Implementation Schedule B of each manufacturer's sales volume of passenger cars and light-duty trucks of less than 6,000 lbs. gross vehicle weight rating (GVWR), the standards applicable to NHMC and CO shall be those set forth in table B in lieu of the standards for such air pollutants otherwise applicable under this title:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

* * * * *

(g) For the purposes of this section, the owner of any motor vehicle or motor vehicle engine warranted under this section is responsible in the proper maintenance of such vehicle or engine to replace and to maintain, at his expense at any service establishment or facility of his choosing, such items as spark plugs, points, condensers, and any other part, item, or device

related to emission control [(but not designed for emission control under the terms of the last three sentences of section 207(a)(1))] (but not designed for emission control under the terms of the last sentence of section 207(a)(3)), unless such part, item, or device is covered by any warranty not mandated by this Act.

* * * * *

(i) Warranty Period.—

(1) In general.—For purposes of subsection (a)(1) and subsection (b), the warranty period, effective with respect to new motor vehicles and engines manufactured in the model year 1995 and thereafter, shall be the first 2 years or 24,000 miles of use (whichever first occurs), except as provided in paragraph (2).

(2) Specified major emission control components.—In the case of a specified major emission control component, the warranty period for purposes of subsection (a)(1) and subsection (b) shall be 5 years or 50,000 miles of use (whichever first occurs). As used in this paragraph, the term ‘specified major emission control component’ means only a catalytic converter or electronic emissions control unit. Nothing in this Act shall be construed to provide that any part (other than a part referred to in the preceding sentence) shall be required to be warranted under this Act for the period of 5 years or 50,000 miles referred to in this paragraph.

(3) Instructions.—Subparagraph (A) of subsection (b)(2) shall apply only where the Administrator has made a determination that the instructions concerned conform to the requirements of subsection (c)(3).

[records and reports

[Sec. 208. (a) Every manufacturer shall establish and maintain such records, make such reports, and provide such information as the Administrator may reasonably require to enable him to determine whether such manufacturer has acted or is acting in compliance with this part and regulations thereunder and shall, upon request of an officer or employee duly designated by the Administrator, permit such officer or employee at reasonable times to have access to and copy such records.

[(b) Any records, reports or information obtained under subsection (a) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (other than emission data), to which the Administrator has access under this section if made public, would divulge methods or processes entitled to protection as trade secrets of such person, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code , except that such record, report, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act. Nothing in this section shall authorize the withholding of information by the Administrator or any officer or employee under his control from the duly authorized committees of the Congress.]

SEC. 208. INFORMATION COLLECTION.

(a) Manufacturer's Responsibility.—Every manufacturer of new motor vehicles or new motor vehicle engines, and every manufacturer of new motor vehicle or engine parts or components, and other persons subject to the requirements of this part, shall establish and maintain records, perform tests where such testing is not otherwise reasonably available under this part (including fees for testing), make reports and provide information the Administrator may reasonably require to determine whether the manufacturer or other person has acted or is acting in compliance with this part and regulations thereunder, or to otherwise carry out the provision of this part, and shall, upon request of an officer or employee duly designated by the Administrator, permit such officer or employee at reasonable times to have access to and copy such records.

(b) Enforcement Authority.—For the purposes of enforcement of this section and section 207(c), officers or employees duly designated by the Administrator upon presenting appropriate credentials are authorized—

(1) to enter, at reasonable times, any establishment of the manufacturer, or of any person whom the manufacturer engages to perform any activity required by subsection (a), for the purposes of inspecting or observing any activity conducted pursuant to subsection (a), and

(2) to inspect records, files, papers, processes, controls, and facilities used in performing any activity required by subsection (a), by such manufacturer or by any person whom the manufacturer engages to perform any such activity.

(c) Availability to the Public; Trade Secrets.—Any records, reports, or information obtained under this part shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or a particular portion thereof (other than emission data), to which the Administrator has access under this section, if made public, would divulge methods or processes entitled to protection as trade secrets of that person, the Administrator shall consider the record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code. Any authorized representative of the Administrator shall be considered an employee of the United States for purposes of section 1905 of title 18 of the United States Code. Nothing in this section shall prohibit the Administrator or authorized representative of the Administrator from disclosing records, reports or information to other officers, employees or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act. Nothing in this section shall authorize the withholding of information by the Administrator or any officer or employee under the Administrator's control from the duly authorized committees of the Congress.

STATE STANDARDS

Sec. 209. (a)***

* * * * *

(e) State Standards.—No State or any political subdivision thereof shall adopt or attempt to enforce any standard or other requirement relating to the control of emissions from new nonroad engines or nonroad vehicles subject to regulation under this Act. Subsection (b) shall not apply for purposes of this subsection.

* * * * *

REGULATION OF FUELS

Sec. 211. (a) The Administrator may by regulation designate any fuel or fuel additive (including any fuel or fuel additive used exclusively in nonroad engines or nonroad vehicles) and, after such date or dates as may be prescribed by him, no manufacturer or processor of any such fuel or additive may sell, offer for sale, or introduce into commerce such fuel or additive unless the Administrator has registered such fuel or additive in accordance with subsection (b) of this section.

(b)(1)***

(2) For the purpose of registration of fuels and fuel additives, the Administrator may also require the manufacturer of any fuel or fuel additive—

(A) to conduct tests to determine potential public health effects of such fuel or additive (including, but not limited to, carcinogenic, teratogenic, or mutagenic effects), and

(B) to furnish the description of any analytical technique that can be used to detect and measure any additive in such fuel, the recommended range of concentration of such additive, and the recommended purpose-in-use of such additive, and such other information as is reasonable and necessary to determine the emissions resulting from the use of the fuel or additive contained in such fuel, the effect of such fuel or additive on the emission control performance of any vehicle [or], vehicle engine, nonroad engine or nonroad vehicle, or the extent to which such emissions affect the public health or welfare.

* * * * *

(c)(1) The Administrator may, from time to time on the basis of information obtained under subsection (b) of this section or other information available to him, by regulation, control or prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive for use in a motor vehicle [or], motor vehicle engine, or nonroad engine or nonroad vehicle (A) if in the judgment of the Administrator any emission product of such fuel or fuel additive causes, or contributes, to air pollution which may reasonably be anticipated to endanger the public health or welfare, or (B) if emission products of such fuel or fuel additive will impair to a significant degree the performance of any emission control device or system which is in general use, or which the Administrator finds has been developed to a point where in a reasonable time it would be in general use were such regulation to be promulgated.

* * * * *

(4)(A) Except as otherwise provided in subparagraph (B) or (C), no State (or political subdivision thereof) may prescribe or attempt to enforce, for the purposes of motor vehicle emission control, any control or prohibition respecting [use of a] any characteristic or component fuel or fuel additive in a motor vehicle or motor vehicle engine—

(i) if the Administrator has found that no control or prohibition of the characteristic or component of a fuel or fuel additive under paragraph (1) is necessary and has published his finding in the Federal Register, or

(ii) if the Administrator has prescribed under paragraph (1) a control or prohibition applicable to such characteristic or component of a fuel or fuel additive, unless State prohibition or control is identical to the prohibition or control prescribed by the Administrator.

(B) Any State for which application of section 209(a) has at any time been waived under section 209(b) may at any time prescribe and enforce, for the purpose of motor vehicle emission control, a control or prohibition respecting any fuel or fuel additive.

(C) A State may prescribe and enforce, for purposes of motor vehicle emission control, a control or prohibition respecting the use of a fuel or fuel additive in a motor vehicle or motor vehicle engine if an applicable implementation plan for such State under section 110 so provides. The Administrator may approve such provision in an implementation plan, or promulgate an implementation plan containing such a provision, only if he finds that the State control or prohibition is necessary to achieve the national primary or secondary ambient air quality standard which the plan implements. The Administrator may find that a State control or prohibition is necessary to achieve that standard if no other measures that would bring about timely attainment exist, or if other measures exist and are technically possible to implement, but are unreasonable or impracticable. The Administrator may make a finding of necessity under this subparagraph even if the plan for the area does not contain an approved demonstration of timely attainment.

[(d) Any person who violates subsection (a) or (f) or the regulations prescribed under subsection (c) or who fails to furnish any information required by the Administrator under subsection (b) shall forfeit and pay to the United States a civil penalty of \$10,000 for each and every day of the continuance of such violation, which shall accrue to the United States and be recovered in a civil suit in the name of the United States, brought in the district where such person has his principal office or in any district in which he does business. The Administrator may, upon application therefor, remit or mitigate any forfeiture provided for in this subsection and he shall have authority to determine the facts upon all such applications.]

(d) Penalties and Injunctions.—

(1) Civil penalties.—Any person who violates subsection (a), (f), or (g) of this section or the regulations prescribed under subsection (c), (h), or (i) of this section or the regulations prescribed under subsection 212(c) or who fails to furnish any information or conduct any tests required by the Administrator under subsection (b) of this section shall be liable to the United States for a civil penalty of not more than the sum of \$25,000 for every day of such violation and the amount of economic benefit or savings resulting from the violation. Any violation with respect to a regulation prescribed under subsection (c) of this section or section 212(c) which establishes a regulatory standard based upon a multiday averaging period shall constitute a separate day of violation for each and every day in the averaging period. Civil penalties shall be assessed in accordance with subsections (b) and (c) of section 205.

(2) Injunctive authority.—The district courts of the United States shall have jurisdiction to restrain violations of subsections (a), (f), and (g) of this section and of the regulations prescribed under subsection (c), (h), or (i) of this section or section 212(c), to award other appropriate relief, and to compel the furnishing of information and the conduct of tests required by the Administrator under subsection (b) of this section. Actions to restrain such violations and compel such actions shall be brought by and in the name of the United States. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

* * * * *

(f)(1)(A) Effective upon March 31, 1977, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for general use in light duty motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206.

(B) Effective upon the date of the enactment of the Clean Air Act Amendments of 1990, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206.

(2) Effective November 30, 1977, it shall be unlawful for any manufacturer of any fuel to introduce into commerce any gasoline which contains a concentration of manganese in excess of .0625 grams per gallon of fuel, except as otherwise provided pursuant to a waiver under paragraph (4).

(3) Any manufacturer of any fuel or fuel additive which prior to March 31, 1977, and after January 1, 1974, first introduced into commerce or increased the concentration in use of a fuel or fuel additive that would otherwise have been prohibited under paragraph (1)(A) if introduced on or after March 31, 1977 shall, not later than September 15, 1978, cease to distribute such fuel or fuel additive in commerce. During the period beginning 180 days after the date of the enactment of this subsection and before September 15, 1978, the Administrator shall prohibit, or restrict the concentration of any fuel additive which he determines will cause or contribute to the failure of an emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified under section 206.

* * * * *

[(g)(1) For the purposes of this subsection:

[(A) The terms “gasoline” and “refinery” have the meaning provided under regulations of the Administrator promulgated under this section.

[(B) The term “small refinery” means a refinery or a portion of refinery producing gasoline—

[(i) the gasoline producing capacity of which was in operation or under construction at any time during the one-year period immediately preceding October 1, 1976, and

[(ii) which has a crude oil or bona fide feed stock capacity (as determined by the Administrator) of 50,000 barrels per day or less, and

[(iii) which is owned or controlled by a refiner with a total combined crude oil or bona fide feed stock capacity (as determined by the Administrator) of 137,500 barrels per day or less.

[(2) No regulations of the Administrator under this section (or any amendment or revision thereof) respecting the control or prohibition of lead additives in gasoline shall require a small refinery prior to October 1, 1982, to reduce the average lead content per gallon of gasoline refined at such refinery below the applicable amount specified in the table below:

[If the average gasoline production of the small refinery for the immediately preceding calendar year (or, in the case of refineries under construction, half the designed crude oil capacity) was (in barrels per day):

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The Administrator may promulgate such regulations as he deems appropriate with respect to the reduction of the average lead content of gasoline refined by small refineries on and after October 1, 1982, taking into account the experience under the preceding provisions of this paragraph.

[(3) Effective on the date of the enactment of this subsection, the regulations of the Administrator under this section respecting fuel additives (40 CFR part 80) shall be deemed amended to comply with the requirement contained in paragraph (2).

[(4) Nothing in this section shall be construed to preempt the right of any State to take action as permitted by section 211(c) (4) of this Act.]

(g) Misfueling.—No person shall introduce, or cause or allow the introduction of, leaded gasoline into any motor vehicle which is labeled “unleaded gasoline only,” which is equipped with a gasoline tank filler inlet designed for the introduction of unleaded gasoline, which is a 1990 or later model year motor vehicle, or which that person knows or should know is a vehicle designed solely for the use of unleaded gasoline. Nothing in this section shall limit the applicability of section 211(d)(3).

(h) Reid Vapor Pressure Requirements.—(1) Not later than 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations making it unlawful for any person during the high ozone season (as defined by the Administrator) to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi). Such regulations shall also establish more stringent Reid Vapor Pressure standards as the Administrator finds necessary to generally achieve comparable evaporative emissions (on a per-vehicle basis) nationwide, taking into consideration the enforceability of such standards, the need of an area for emission control, and economic factors.

(2) Such regulations shall provide that the requirements of this subsection shall take effect not later than the high ozone season for 1992, and shall include such provisions as the Administrator determines are necessary to implement and enforce the requirements of this subsection.

(3) In establishing standards for fuel volatility under this subsection, the Administrator shall permit a 1.0 pound per square inch (psi) tolerance level for gasoline containing at least 10 percent ethanol. A manufacturer or processor of gasoline

containing at least 10 percent ethanol shall be deemed to be in full compliance with such standards if the Administrator provides a certification (based on testing) or other evidence acceptable to the Administrator that—

(A) the gasoline portion of the blend complies with the gasoline volatility standards under this subsection,

(B) the ethanol portion of the blend does not exceed its waiver conditions under subsection (f)(4), and

(C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend.

(4) The provisions of this subsection shall apply only to the 48 contiguous States and the District of Columbia.

(i) Sulfur Content Requirements for Diesel Fuel.—(1) Effective October 1, 1993, no person shall manufacture, sell, supply, offer for sale or supply, dispense, transport, or introduce into commerce motor vehicle diesel fuel which contains a concentration of sulfur in excess of 0.05 per centum (by weight) or which fails to meet a cetane index minimum of 40.

(2) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations to implement and enforce the requirements of paragraph (1). The Administrator may require manufacturers and importers of diesel fuel not intended for use in motor vehicles to dye such fuel in a particular manner in order to segregate it from motor vehicle diesel fuel.

(3) The sulfur content of fuel required to be used in the certification of 1991 through 1993 model year heavy-duty diesel vehicles and engines shall be 0.10 percent (by weight). The sulfur content and cetane index minimum of fuel required to be used in the certification of 1994 and later model year heavy-duty diesel vehicles and engines shall comply with the regulations promulgated under paragraph (2).

(4) The States of Alaska and Hawaii may be exempted from the requirements of this subsection in the same manner as provided in section 324. The Administrator shall take final action on any petition filed under section 324 for an exemption from the requirements of this subsection, within 12 mnths from date of the petition.

(j) Lead Substitute Gasoline Additives.—(1) After the date of the enactment of the Clean Air Act Amendments of 1990, any person proposing to register any gasoline additive under subsection (a) or to use any previously registered additive as a lead substitute may also elect to register the additive as a lead substitute gasoline additive for reducing valve seat wear by providing the Administrator with such relevant information regarding product identity and composition as the Administrator deems necessary for carrying out the responsibilities of paragraph (2) of this subsection (in addition to other information which may be required under subsection (b)).

(2) In addition to the other testing which may be required under subsection (b), in the case of the lead substitute gasoline additives referred to in paragraph (1), the Administrator shall develop and publish a test procedure to determine the additives' effectiveness in reducing valve seat wear and the additives' tendencies to produce engine deposits and other adverse side effects. The test procedures shall be developed in cooperation with the Secretary of Agriculture and with the input of additive manufacturers, engine and engine components manufacturers, and other interested persons. The Administrator shall enter into arrangements with an independent laboratory to conduct tests of each additive using the test procedures developed and published pursuant to this paragraph. The Administrator shall publish the results of the tests by company and additive name in the Federal Register along with, for comparison purposes, the results of applying the same test procedures to gasoline containing 0.1 gram of lead per gallon in lieu of the lead substitute gasoline additive. The Administrator shall not rank or otherwise rate the lead substitutive additives. Test procedures shall be established within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990. Additives shall be tested within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990 or 6 months after the lead substitute additives are identified to the Administrator.

(3) The Administrator may impose a user fee to recover the costs of testing of any fuel additive referred to in this subsection. The fee shall be paid by the person proposing to register the fuel additive concerned. Such fee shall not exceed \$20,000 for a single fuel additive.

(4) There are authorized to be appropriated to the Administrator not more than \$1,000,000 for the first full fiscal year after the date of the enactment of the Clean Air Act Amendments of 1990 to establish test procedures and conduct engine tests as provided in this subsection. Not more than \$500,000 per year is authorized to be appropriated for 5 subsequent fiscal years.

(5) Any fees collected under this subsection shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency's activities for which the fees were collected.

[development of low-emission vehicles

[Sec. 212. (a) For the purpose of this section—

[(1) The term “Board” means the Low-Emission Vehicle Certification Board.

[(2) The term “Federal Government” includes the legislative, executive, and judicial branches of the Government of the United States, and the government of the District of Columbia.

[(3) The term “motor vehicle” means any self-propelled vehicle designed for use in the United States on the highways, other than a vehicle designed or used for military field training, combat, or tactical purposes.

[(4) The term “low-emission vehicle” means any motor vehicle which—

[(A) emits any air pollutant in amounts significantly below new motor vehicle standards applicable under section 202 at the time of procurement to that type of vehicle; and

[(B) with respect to all other air pollutants meets the new motor vehicle standards applicable under section 202 at the time of procurement to that type of vehicle.

[(5) The term “retail price” means (A) the maximum statutory price applicable to any class or model of motor vehicle; or (B) in any case where there is no applicable maximum statutory price, the most recent procurement price paid for any class or model of motor vehicle.

[(b)(1) There is established a Low-Emission Vehicle Certification Board to be composed of the Administrator or his designee, the Secretary of Transportation or his designee, the Chairman of the Council on Environmental Quality or his designee, the Director of the National Highway Safety Bureau in the Department of Transportation, the Administrator of General Services, and two members appointed by the President. The President shall designate one member of the Board as Chairman.

[(2) Any member of the Board not employed by the United States may receive compensation at the rate of \$125 for each day such member is engaged upon work of the Board. Each member of the Board shall be reimbursed for travel expenses, including per diem in lieu of subsistence as authorized by section 5703 of title 5, United States Code, for persons in the Government service employed intermittently.

[(3)(A) The Chairman, with the concurrence of the members of the Board, may employ and fix the compensation of such additional personnel as may be necessary to carry out the functions of the Board, but no individual so appointed shall receive compensation in excess of the rate authorized for GS-18 by section 5332 of title 5, United States Code.

[(B) The Chairman may fix the time and place of such meetings as may be required, but a meeting of the Board shall be called whenever a majority of its members so requests.

[(C) The Board is granted all other powers necessary for meeting its responsibilities under this section.

[(c) The Administrator shall determine which models or classes of motor vehicles qualify as low-emission vehicles in accordance with the provisions of this section.

[(d)(1) The Board shall certify any class or model of motor vehicles—

[(A) for which a certification application has been filed in accordance with paragraph (3) of this subsection;

[(B) which is a low-emission vehicle as determined by the Administrator; and

[(C) which it determines is suitable for use as a substitute for a class or model of vehicles at that time in use by agencies of the Federal Government.

The Board shall specify with particularity the class or model of vehicles for which the class or model of vehicles described in the application is a suitable substitute. In making the determination under this subsection the Board shall consider the following criteria:

[(i) the safety of the vehicle;

[(ii) its performance characteristics;

[(iii) its reliability potential;

[(iv) its serviceability;

[(v) its fuel availability;

[(vi) its noise level; and

[(vii) its maintenance costs as compared with the class or model of motor vehicle for which it may be a suitable substitute.

[(2) Certification under this section shall be effective for a period of one year from the date of issuance.

[(3)(A) Any party seeking to have a class or model of vehicle certified under this section shall file a certification application in accordance with regulations prescribed by the Board.

[(B) The Board shall publish a notice of each application received in the Federal Register.

[(C) The Administrator and the Board shall make determinations for the purpose of this section in accordance with procedures prescribed by regulation by the Administrator and the Board, respectively.

[(D) The Administrator and the Board shall conduct whatever investigation is necessary, including actual inspection of the vehicle at a place designated in regulations prescribed under subparagraph (A).

[(E) The Board shall receive and evaluate written comments and documents from interested parties in support of, or in opposition to, certification of the class or model of vehicle under consideration.

[(F) Within ninety days after the receipt of a properly filed certification application, the Administrator shall determine whether such class or model of vehicles is a low-emission vehicle, and within 180 days of such determination, the Board shall reach a decision by majority vote as to whether such class or model of vehicle, having been determined to be a low-emission vehicle, is a suitable substitute for any class or classes of vehicles presently being purchased by the Federal Government for use by its agencies.

[(G) Immediately upon making any determination or decision under subparagraph (F), the Administrator and the Board shall each publish in the Federal Register notice of such determination or decision, including reasons therefor and in the case of the Board any dissenting views.

[(e)(1) Certified low-emission vehicles shall be acquired by purchase or lease by the Federal Government for use by the Federal Government in lieu of other vehicles if the Administrator of General Services determines that such certified vehicles have procurement costs which are no more than 150 per centum of the retail price of the least expensive class or model of motor vehicle for which they are certified substitutes.

[(2) In order to encourage development of inherently low-polluting propulsion technology, the Board may, at its discretion, raise the premium set forth in paragraph (1) of this subsection to 200 per centum of the retail price of any class or model of motor vehicle for which a certified low-emission vehicle is a certified substitute, if the Board determines that the certified low-emission vehicle is powered by an inherently low-polluting propulsion system.

[(3) Data relied upon by the Board and the Administrator in determining that a vehicle is a certified low-emission vehicle shall be incorporated in any contract for the procurement of such vehicle.

[(f) The procuring agency shall be required to purchase available certified low-emission vehicles which are eligible for purchase to the extent they are available before purchasing any other vehicles for which any low-emission vehicle is a certified substitute. In making purchasing selections between competing eligible certified low-emission vehicles, the procuring agency shall give priority to (1) any class or model which does not require extensive periodic maintenance to retain its low-polluting qualities or which does not require the use of fuels which are more expensive than those of the classes or models of vehicles for which it is a certified substitute; and (2) passenger vehicles other than buses.

[(g) For the purpose of procuring certified low-emission vehicles any statutory price limitations shall be waived.

[(h) The Administrator shall, from time to time as the Board deems appropriate, test the emissions from certified low-emission vehicles purchased by the Federal Government. If at any time he finds that the emission rates exceed the rates on which certification under this section was based, the Administrator shall notify the Board. Thereupon the Board shall give the supplier of such vehicles written notice of this finding, issue public notice of it, and give the supplier an opportunity to make necessary repairs, adjustment, or replacements. If no such repairs, adjustments, or replacements are made within a period to be set by the Board, the Board may order the supplier to show cause why the vehicle involved should be eligible for recertification.

[(i) There are authorized to be appropriated for paying additional amounts for motor vehicles pursuant to, and for carrying out the provisions of, this section, \$5,000,000 for the fiscal year ending June 30, 1971, and \$25,000,000 for each of the two succeeding fiscal years.

[(j) The Board shall promulgate the procedures required to implement this section within one hundred and eighty days after the date of enactment of the Clean Air Amendments of 1970.

[fuel economy improvement from new motor vehicles

[Sec. 213. (a)(1) The Administrator and the Secretary of Transportation shall conduct a joint study, and shall report to the Committee on Interstate and Foreign Commerce of the United States House of Representatives and the Committees on Public Works and Commerce of the United States Senate within one hundred and twenty days following the date of enactment of this section, concerning the practicability of establishing a fuel economy improvement standard of 20 per centum for new motor vehicles manufactured during and after model year 1980. Such study and report shall include, but not be limited to, the technological problems of meeting any such standard, including the leadtime involved; the test procedures required to determine compliance; the economic costs associated with such standard, including any beneficial economic impact; the various means of enforcing such standard; the effect on consumption of natural resources, including energy consumed; and the impact of applicable safety and emission standards. In the course of performing such study, the Administrator and the Secretary of Transportation shall utilize the research previously performed in the Department of Transportation, and the Administrator and the Secretary shall consult with the Federal Energy Administrator, the Chairman of the Council on Environmental Quality, and the Secretary of the Treasury. The Office of Management and Budget may review such report before its submission to such committees of the Congress, but such Office may not revise the report or delay its submission beyond the date prescribed for its submission, and may submit to Congress its comments respecting such report. In connection with such study, the Administrator may utilize the authority provided in section 307(a) of this Act to obtain necessary information.

[(2) For the purpose of this section, the term "fuel economy improvement standard" means a requirement of a percentage increase in the number of miles of transportation provided by a manufacturer's entire annual production of new motor vehicles per unit of fuel consumed, as determined for each manufacturer in accordance with test procedures established by the Administrator pursuant to this Act. Such term shall not include any requirement for any design standard or any other requirement specifying or otherwise limiting the manufacturer's discretion in deciding how to comply with the fuel economy improvement standard by any lawful means.

[study of particulate emissions from motor vehicles

[Sec. 214. (a)(1) The Administrator shall conduct a study concerning the effects on health and welfare of particulate emissions from motor vehicles or motor vehicle engines to which section 202 applies. Such study shall characterize and quantify such emissions and analyze the relationship of such emissions to various fuels and fuel additives.

[(2) The study shall also include an analysis of particulate emissions from mobile sources which are not related to engine emissions (including, but not limited to tire debris, and asbestos from brake lining).

[(b) The Administrator shall report to the Congress the findings and results of the study conducted under subsection (a) not later than two years after the date of the enactment of the Clean Air Act Amendments of 1977. Such report shall also include recommendations for standards or methods to regulate particulate emissions described in paragraph (2) of subsection (a).]

SEC. 212. CLEAN FUEL REQUIREMENTS.

(a) Urban Buses.—

(1) In general.—Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations under this subsection applicable to new urban buses operated primarily in a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area (as defined by the United States Office of

Management and Budget) with a 1980 population of 750,000 or more. The Administrator shall also promulgate comparable regulations for existing urban buses operated primarily in such areas which, after January 1, 1995, have their engines replaced or rebuilt, taking into consideration costs, energy, safety, and other relevant factors, including lead time.

(2) Requirement.—The regulations under this subsection shall provide that all new urban buses purchased or placed into service and operated by owners or operators of urban buses in the areas referred to in paragraph (1) shall be clean-fuel vehicles capable of operating, and shall be exclusively operated, on clean alternative fuel.

(3) Effective date and phase-in.—The Administrator shall prescribe a schedule phasing in the applicability of the requirements established by this subsection for new urban buses over the 1992 through 1995 model years as follows: the requirements shall apply to 10 percent of new urban buses purchased or placed into service in model year 1992; the requirements shall apply to 25 percent of new urban buses purchased or placed into service in model year 1993; the requirements shall apply to 60 percent of new urban buses purchased or placed into service in model year 1994; and the requirements shall apply to 100 percent of such buses in model year 1995 and thereafter. At least 30 percent of the total purchases of new urban buses for all areas in each model year after January 1, 1995, shall be clean fuel vehicles that exclusively use either natural gas, ethanol, or methanol or another clean alternative fuel with comparable emissions, as determined by the Administrator. The Administrator shall prescribe emission standards for pollutants other than particulates under section 202 for urban buses to be considered clean fuel vehicles in model year 1992 and before application of standards under subsection (b). Such standards shall be comparable to the standard for particulates under this subsection.

(4) Application.—Application of one or more of the requirements prescribed under this subsection may be delayed by up to 2 years if the Administrator determines that such a delay will substantially advance the technology, improve the benefits, or lower the costs of the urban bus program established by this subsection.

(5) Particulate matter.—The regulations under section 202(a)(1) applicable to emissions of particulate matter from 1991 through 1993 model year urban buses capable of operating on diesel fuel shall contain a standard which provides that emissions of particulate matter from such buses may not exceed 0.25 grams per brake horsepower-hour. Emissions of particulate matter from urban buses purchased or placed into service after model year 1993 that use clean alternative fuels shall not exceed 0.10 grams per brake horsepower-hour. The emission standard shall be prescribed by regulation within 180 days after the date of the enactment of the Clean Air Act Amendments of 1990.

(b) Standards for Clean-Fuel Vehicles.—

(1) In general.—A motor vehicle that, when operated on a clean alternative fuel, is certified to meet the applicable emissions standards under section 202 for carbon monoxide, oxides of nitrogen, and particulate matter, and is certified to meet the emission standards specified in paragraph (2), (3), or (4), as applicable, shall be considered a clean fuel vehicle within the meaning of section 216 and this section.

(2) Standards for passenger cars and light-duty trucks up to 3,750 lbs. (lvw).—Within 26 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate standards under this paragraph applicable to all passenger cars and all light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of up to 3,750 lbs. that are to be considered clean-fuel vehicles.

(A) Ozone-forming vocs.—The standards contained in the regulations under this paragraph shall require that total vehicle emissions of ozone-forming volatile organic compounds not exceed the level set forth in table 1 for such vehicles manufactured in the applicable model year:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(B) Other substances.—

(i) Phase 1.—The regulations under this paragraph shall require that, for vehicles manufactured in the model year 1995 and thereafter, total vehicle emissions of benzene, 1,3-butadiene, gasoline vapors, polycyclic organic material (POM), including POM in diesel particulates, and formaldehyde shall not exceed the level that, in the Administrator's judgment, may be reasonably expected to achieve a 12 percent reduction from the baseline in the annual incidence of human cancer attributable to such emissions. The baseline for determining the 12 percent reduction shall be the annual incidence of human cancer attributable to emissions of such air pollutants from such conventional gasoline-fueled vehicles certified to meet the standards under section 202 for model year 1994. For purposes of determining the level of such emissions from conventional gasoline-fueled vehicles for such model year 1994 standards, emissions shall be measured from vehicles using 1990 certification gasoline (indoline) with a Reid Vapor Pressure of 9.0 psi which was determined by the Administrator in September 1989 in a Special Report entitled "Analysis of the Economic Effects of Methanol as an Automotive Fuel" to produce ozone forming volatile organic compound emissions of 0.95 gpm.

(ii) Phase 2.—The Administrator shall revise the regulations under this paragraph applicable to any model year after the model year 1999 to substitute a 24 percent reduction for the 12 percent reduction referred to in clause (i), except that if the Administrator determines on petition or on the Administrator's own motion, that (for any model year after model year 1999) it is not technically feasible to reduce emissions of such air pollutants, taking into consideration the availability and cost of the technology, and noise, energy, and safety factors, by 24 percent, the Administrator shall revise the regulations under this paragraph to limit such emission to a level that may reasonably be anticipated to achieve reduction of not less than 18 percent in the annual incidence of human cancer attributable to such emissions and include the basis for that determination in such regulations. The Administrator shall act on any such petition within 9 months after it is received.

(3) Light-duty trucks.—The Administrator shall, by rule, establish standards and emission reduction levels under this subsection for light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of 3,750 lbs. or more but less than or equal to 5,750 lbs. (lvw) manufactured during the model year 2000 and thereafter.

(4) Heavy-duty trucks.—Effective for model years 2000 or later, the Administrator may at any time, by rule, establish standards and emission reduction levels under this subsection for motor vehicles with a gross vehicle weight rating (gvwr) of 8,500 lbs. or more. The standards and emission reduction referred to in this paragraph and paragraph (3) shall contain emission standards and reductions comparable in stringency to those under paragraph (2), taking into account the weight class and operating conditions and uses for which such vehicles are designed and the Administrator shall take into consideration the availability and cost of applicable technology and noise, energy, and safety factors. The standard established under this paragraph shall not apply with respect to emissions of particulate matter from urban buses. Such standards and reductions shall not take effect before the end of the fourth full model year after promulgation.

(5) Compliance.—In determining compliance by vehicles and engines in actual use with the emission standards and reductions prescribed under this subsection by testing in-use vehicles on certification-type fuels, only vehicles that have been detectably abused, tampered with, or not maintained in a manner that would likely affect emissions performance may be excluded from the sample tested pursuant to section 207(c). When a vehicle that operates on 2 kinds of fuel is certified or tested, it shall be certified or tested on one fuel only after all traces of the other fuel that can practically be removed from the vehicle's fuel system have been removed. The Administrator may require a manufacturer to remedy nonconforming engines or vehicles pursuant to section 207(c) either (A) when a substantial number of vehicles fails to comply with the applicable emissions standards and reductions prescribed under this subsection or (B) when the average emissions performance of a representative sample does not satisfy the applicable emission standards and reductions prescribed under this subsection. Recall procedures established under this paragraph apply only to standards and reductions promulgated pursuant to this section. Any manufacturer shall be treated as complying with the requirements of this subsection if the manufacturer specifies the use of the reformulated gasoline specified by the Administrator under subsection (c)(5) and if the vehicles produced by such manufacturer for sale in the covered areas comply with the standards and requirements established under section 202 (and related provisions of this title) that are generally applicable to such vehicles in the model year in which they are produced. For purposes of this subsection, the emission level of ozone-forming volatile organic compounds shall be determined by the Administrator by testing, in accordance with the requirements and procedures of section 206, a representative sample of

vehicles with no more than 62,000 miles of proper in-use operation in customer hands, as provided in the report referred to in subsection (b)(2)(B)(i). Compliance shall be determined based on the mean level of the applicable emissions from such representative sample.

(6) EPA authority.—Nothing in this section shall be construed to give the Administrator authority to mandate the production or sale of clean-fuel vehicles or to specify as applicable, the models, lines, or types of, or marketing or price practices, policies, or strategies for, vehicles subject to this section. Nothing in this section shall be construed to give the Administrator authority to mandate marketing or pricing practices, policies, or strategies for fuels.

(7) Credits.—The Administrator shall, by rule, promulgate regulations for granting a manufacturer an appropriate amount of credits toward compliance with the requirements of this subsection for clean-fuel vehicles that achieve emission reductions greater than those required of such vehicles under this subsection and for clean fuel vehicles in classes or categories not required under this subsection. A manufacturer granted credits may use such credits or transfer some or all of the credits for use by one or more other manufacturers in the same area included in the fleet program by subsection (f) in demonstrating compliance with such requirements. Such credits may be used to treat vehicles which do not meet the requirements of this subsection as complying with the requirements of this subsection. Credits may not be used to permit the manufacture or sale of any vehicle which does not comply with standards set forth in section 202. The Administrator may make the credits available for use after consideration of enforceability, environmental and economic factors and upon such terms and conditions as the Administrator finds appropriate.

(c) Availability of Clean Fuels.—

(1) In general.—Clean alternative fuels shall be made available by fuel providers as specified by the Administrator in any area in which clean-fuel vehicles or clean-fuel fleet vehicles are required to be made available under this section.

(2) Availability.—The Administrator shall determine the clean alternative fuels to be made available, and the amounts thereof necessary, to allow operation of vehicles so that they comply with the applicable emissions standards, based on motor vehicle manufacturers' projections of future sales of clean-fuel vehicles, and clean-fuel fleet vehicles consultations with the affected fleet operators and State and local governments and on a determination of cost effectiveness, taking into consideration technological feasibility, health, environment, and safety, net air quality improvement, fuel availability, consumer acceptance, capability of production of vehicles and fuels, and other relevant factors, including an evaluation of the differing characteristics of commercial, government, and passenger fleets and the capability of centrally fueled and maintained fleets to utilize clean fuels.

(3) Minimum availability requirements.—At a minimum one clean alternative fuel shall be offered for retail sale at retail gasoline dispensing facility dispensing at least 50,000 gallons of motor vehicle fuel per month, on average, in the areas in which such vehicles are required to be made available. The Governor of any State in which the requirements of this subsection apply may modify such requirements exempting some such facilities for a period not longer than 5 years after such requirements first apply, provided that information available to the Governor indicates that such fuels will be otherwise readily available throughout the area. If a retail gasoline dispensing facility would have to remove or replace one or more motor vehicle fuel underground storage tanks and accompanying piping in order to comply with the provisions of this section, and it had removed and replaced such tank or tanks and accompanying piping prior to the date of the enactment of the Clean Air Act Amendments of 1990, it shall not be required to comply with this subsection until a period of 7 years has passed from the date of the removal and replacement of such tank or tanks.

(4) Credits.—The Administrator shall, by rule, promulgate regulations for granting persons subject to the requirements prescribed under this subsection appropriate credits for making greater quantities of clean alternative fuels available than required under this subsection or for making available fuel which result in greater emission reductions than required under this subsection, and any person granted credits may transfer some or all of the credits for use by one or more persons

in the same area included in the fleet program under subsection (f) in demonstrating compliance with such requirements. The Administrator may make the credits available for use after consideration of enforceability, safety, environmental, and economic factors and upon such terms and conditions as the Administrator finds appropriate.

(5) Performance of clean fuel.—The Administrator shall by regulation establish specifications for any clean alternative fuel required to be made available under this subsection as the Administrator finds necessary to reduce or eliminate an unreasonable risk to public health, welfare, or safety associated with its use or to ensure acceptable vehicle maintenance and performance characteristics. In determining the specifications for each fuel or fuels to be made available, the Administrator shall select the specifications resulting in the maximum level of emissions reductions that can be achieved to the extent that it is needed to meet the standards for the applicable model years, provided that such specifications will result in the establishment of a cost effective combination of fuel or fuels and motor vehicle technology. Such specifications shall include at least one specification for a reformulated gasoline that can be utilized in gasoline-fueled vehicles satisfying the emissions standards prescribed under section 202 for the applicable model years to satisfy the requirements of subsection (b).

(6) Enforcement.—A fuel provider who fails to make such fuel available as required by this section and in the regulations under this subsection shall be liable for a civil penalty under the first sentence of section 205.

(d) Clean Fuel Vehicle Program.—

(1) In general.—For purposes of subsections (b) and (c), all new passenger cars and all new light-duty trucks weighing up to 3,750 lbs. (1vw) manufactured in model year 1995 and thereafter and sold (in ozone nonattainment areas having a 1988 ozone design value at or above 0.180 parts per million and having a 1980 population of 250,000 or more) at the first retail sale in such areas shall be clean fuel vehicles unless the Administrator has approved a substitute program under section 183(c)(3) (B). For purposes of identifying such areas, the design value shall be calculated according to the most recent interpretation methodology issued by the Administrator before the date of the enactment of the Clean Air Act Amendments of 1990.

(2) Program application.—Subject to provisions of paragraph (3), paragraph (1) may apply to any serious ozone nonattainment area (as classified under subpart 2 of part D of title I) at the request of the Governor of the State in which the area is located upon the approval of the Administrator. The Administrator shall approve by rule any such request where the Governor of the State has made a determination that inclusion of the area in the clean fuel vehicle program is appropriate and would result in progress toward attainment of the national ambient air quality standard for ozone and the Administrator finds in such rule that such request is reasonable, taking into consideration the manufacturer's projection and availability of clean alternative fuels, and such determination is not arbitrary or capricious. Any additional requirements resulting from such approval shall become applicable after such period as the Administrator finds in such rule necessary for the requisite vehicles and fuels to be made available, giving appropriate consideration to model availability and the cost of compliance within such period.

(3) Public hearing.—In promulgating any regulation under this section, the Administrator shall hold at least one public hearing and shall consider the ozone, toxic and global warming benefits of the program; safety and public health issues and measures necessary to avoid any risks involved; technology, cost effectiveness, clean alternative fuel availability, results of public and private research and testing, capability of manufacturers of vehicles and fuel providers to make available such fuels and vehicles; ways to ensure customer acceptance; the expected cold start performance, serviceability, maintenance, durability, and reliability of the vehicles likely to be produced; other environmental, economic, energy, national security, and safety implications of the program; along with the results of ongoing programs demonstrating the use of motor vehicles operated on clean alternative fuels.

(e) EPA Determination.—The requirements prescribed under subsections (c) (relating to availability of clean alternative fuel) and (d) (relating to the clean-fuel vehicle program) shall be delayed by up to 2 years if the Administrator determines—

(1) within 30 months of the date of the enactment of the Clean Air Act Amendments of 1990 that a delay will substantially advance the technology, improve the benefits, or lower the costs of the clean-fuel vehicle program, or will ensure that the manufacturers and fuel providers will have a minimum of 3 full model years after promulgation of regulations under subsections (b), (c) and (d), or

(2) that a delay is appropriate due to the likelihood of a national economic recession.

(f) Fleet Vehicle Program.—

(1) Clean-fuel fleet vehicles.—

(A) Passenger cars and light-duty trucks of up to 3,750 lbs. (lvw).—For purposes of this subsection, the term “clean-fuel fleet vehicle” means a clean fuel vehicle that meets the applicable requirements of subsection (b) and meets a standard for ozone-forming volatile organic compounds that requires that total vehicle emissions of ozone-forming volatile organic compounds not exceed the level set forth in table 2, in the case of all passenger cars and light-duty trucks of up to 8,500 lbs. gross vehicle weight rating (gvwr) with a loaded vehicle weight (lvw) of up to 3,750 lbs., manufactured in the applicable model year:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(B) Phase 2.—Under Phase 2, clean-fuel fleet vehicles referred to in subparagraph (A) shall also meet a reduction in emissions of other substances (as described under subsection (b)(2)(B)) of a percentage to be determined by the Administrator, by rule, that may reasonably be expected to result from the use of clean alternative fuel and clean-fuel vehicle technologies that comply with the ozone-forming VOC standards prescribed under Phase 2 or as revised under subparagraph (C).

(C) Adjustment of phase 2 reduction.—The Administrator may in response to a petition filed by a manufacturer or fuel provider, or on the Administrator's own motion, by rule adjust the Phase 2 level specified in table 2 of subparagraph (A) from 0.25 gpm to not greater than 0.53 gpm if the Administrator determines in such rule that such adjustment is appropriate, giving consideration to the need to provide for attainment of the national ambient air quality standard for ozone in the areas to which this subsection applies and the technical and economic feasibility, of achieving a 0.25 gpm standard taking into consideration adequate lead time, energy, noise, and safety factors. Unless the Administrator promulgates under this subparagraph a standard of 0.53 gpm for total ozone forming volatile organic compounds, the Administrator may, in order to achieve the reduction required under this subparagraph, by rule, waive the standard for oxides of nitrogen applicable to any class or category of vehicles or engines in Phase II and establish a different standard under this title, except that such standard shall not exceed, in the case of passenger cars and light duty trucks up to 3,750 loaded vehicle weight (lvw) 0.7 grams per mile (gpm).

(D) Fleet vehicles with lvw above 3,750.—The Administrator shall, by rule, establish standards under this subsection for emissions of ozone-forming volatile organic compounds from clean-fuel fleet vehicles manufactured in model years 1995 and thereafter with a gross vehicle weight rating of 8,500 lbs. or less with a loaded vehicle weight (lvw) of 3,751 lbs. or more but less than or equal to 5,750 lbs. (lvw) loaded vehicle weight. In addition, the Administrator may at any time, by rule, establish such standards for clean-fuel fleet vehicles with a gross vehicle weight rating (gvwr) of 8,501 lbs. or more. The standards referred to in this paragraph shall be comparable to the standards under subparagraph (A) or, as revised, under subparagraph (B). The phase-in under paragraph (2)(C) shall apply to vehicles described in this subparagraph in the same manner as to light-duty vehicles referred to in paragraph (2)(C). The Administrator shall provide lead time of 4 full model years after promulgation.

(2) State implementation plan revision for areas with design value 0.18 or higher.—(A) Each State in which there is located all or part of an ozone nonattainment area subject to the clean-fuel vehicle program under subsection (d) or a consolidated Metropolitan Statistical Area (as defined by the United States Office and Management and Budget) located at an altitude greater than 4,000 feet and having a 1980 population of 300,000 or more shall prepare and submit, pursuant to section 110 and part D, a revision of its implementation plan for each such area providing for effective implementation and enforcement

of the requirements of this subsection with respect to covered fleets. The revision shall include mechanisms to facilitate the transfer of credits under paragraph (6). Except in the case of an area referred to in subparagraph (B), the plan revision shall be submitted within 30 months after the date of the enactment of the Clean Air Act Amendments of 1990.

(B) Within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall extend by rule the requirements of this subsection to any Serious ozone nonattainment area not subject to the clean fuel vehicle program under subsection (d) if the area is of comparable size and population to the areas subject to such program under subsection (d) and if the Administrator finds in such rule that extending such requirement is needed for attainment of the national primary ambient air quality standard for ozone in such area, taking into consideration the applicable State implementation plan in effect under title I, and other relevant factors.

(C) The plan revision required under this subsection shall contain provisions requiring at least 30 percent of all new light-duty vehicles that are covered fleet vehicles acquired for use in the area by the operator of each covered fleet beginning with vehicle model year 1995, at least 50 percent of such vehicles in model year 1997, and at least 70 percent in model year 1998 and each model year thereafter be clean-fuel fleet vehicles and require (consistent with the requirements of this section regarding retail sales of fuel) fuel providers in such area to make available and accessible clean alternative fuels for such vehicles. The plan revision required under this subsection shall contain provisions substituting a 3 full model year phase-in schedule for Phase 2 vehicles at 0.25 gpm. At any time after plans are required to be submitted under this paragraph, the Administrator may by rule increase the minimum percentage of the new vehicles purchased or leased subject to the requirement of this paragraph beginning in model year 2000 or thereafter as necessary to ensure that the maximum feasible percentage of covered fleet vehicles in the area are clean-fuel fleet vehicles and operate on clean alternative fuels.

(D) Each State shall develop such plan in consultation with fleet operators, motor vehicle and engine manufacturers, fuel providers, including fuel producers and distributors, and other interested persons and shall take into consideration the covered fleet vehicles operational range, specialty uses, vehicle and fuel availability (including fueling practices of such operator's fleet), conversion capability, costs, safety, resale value of vehicles and equipment, and other relevant factors. If a State determines, based on such factors, that the requirements of this subsection cannot be feasibly achieved or would create an undue economic hardship for the State or such fleets, the State may include a lesser percentage of clean-fuel fleet vehicles than required by subparagraph (C) in its implementation plan. The Administrator shall consider and address such factors in any such rule under subparagraph (C).

(E) The choice of a clean-fuel fleet vehicle from available vehicles and a clean alternative fuel shall be made by the fleet owner or operator subject to the requirements of this subsection and the availability of such vehicles and fuels by motor vehicle manufacturers and fuel providers.

(3) Vehicle availability exemption.—The Administrator shall establish by rule (not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990) standards to be used to determine the availability of suitable clean-fuel fleet vehicles, taking into consideration vehicle size and type, driving range, cargo area, capacity, Federal and State axle and gross weight limits, engine performance, unique requirements for vehicle use, and other factors which may create undue economic hardship for covered fleet operators. The Administrator shall include in such rule a procedure under which a State or the Administrator shall, upon a showing by a fleet operator that suitable clean-fuel fleet vehicles or clean alternative fuels are not reasonably available from, as appropriate, a vehicle manufacturer or fuel provider, exempt such operator from the requirements of this subsection for a period of one year. The fleet operator may certify annually thereafter that such suitable clean-fuel fleet vehicles or clean alternative fuels are not available, and the State or the Administrator shall thereupon provide further annual exemption from the requirements of this subsection upon such certification, unless the Administrator or the State finds that the standards established under subparagraphs (A) and (B) can be met.

(4) Emission reduction credits.—The Governor shall issue appropriate credits to each fleet operator for the use of clean-fuel fleet vehicles in excess of the percentage required under this subsection or for the use of clean fuel vehicles which have

emissions lower than required under subparagraph (A), (B), or (C) of paragraph (1) of this subsection. The Governor shall also issue appropriate credits to operators of clean-fuel fleet vehicles within the nonattainment area but not subject to the requirements of this subsection. Any person granted such credits may trade, sell, or otherwise transfer some or all of such credits to a fleet operator who may use such credits to demonstrate compliance with the requirements of this subsection.

(5) Transportation control credits.—The Administrator shall, by rule, ensure that transportation control measures that restrict vehicle usage do not apply to any covered fleet vehicle that is a clean-fuel vehicle meeting the applicable requirements of this subsection. Any State which obligates the operator of a clean-fuel fleet vehicle in compliance with this subsection to comply with the transportation control measures specified in section 108(f)(1)(A)(viii) (relating to high occupancy vehicles) or (i) (relating to trip-reduction ordinances) may not credit toward the percent emission reduction requirement achieved under section 183(b)(3)(B) any emission reduction pursuant to this subsection. Notwithstanding the provisions of the previous sentence, a State may credit under section 183(b)(3)(B) any emission reductions pursuant to this subsection if the State demonstrates to the satisfaction of the Administrator that any increase in emissions which would result from traffic congestion caused by the operation of such fleet vehicles exceeds the emission reductions attributable (directly or indirectly) to the use of clean fuel fleet vehicles under this subsection.

(6) Voluntary compliance.—(A) For purposes of this paragraph, the Administrator may, on the Administrator's own motion or in response to a petition from any person, establish voluntary standards for emissions of ozone-forming volatile organic compounds for any class or category of covered fleet vehicles over 8,500 lbs. gross vehicle weight rating (gvwr) which are not otherwise subject to standards under paragraph (1). The standards prescribed under this subparagraph shall be comparable to the standards under paragraph (1).

(B) The operator of any covered fleet vehicles meeting the voluntary standards under subparagraph (A) may elect to have those vehicles operating within an area subject to paragraph (2) treated the same as a clean-fuel fleet vehicle for purposes of paragraphs (4) and (5), and the State shall take into account the emissions reductions directly attributable to voluntary compliance under this paragraph. Once such an election has been made, the operator and the vehicles covered by the election shall be subject to the same obligations and conditions as if the vehicles were subject to a standard under paragraph (1).

(7) Application of other provisions.—This subsection shall not apply to urban buses subject to subsection (a) or to Federal Government fleets subject to subsection (h).

(g) Oxygenated Fuels.—

(1) Moderate co areas with design value above 12.7.—Each State in which there is located all or part of an area classified under section 186 as a Moderate Area for carbon monoxide which has for the most recent year a carbon monoxide design value at or above 12.7 parts per million at the time of classification (as calculated according to the most recent methodology issued before the date of the enactment of the Clean Air Act Amendments of 1990 by the Administrator) shall submit to the Administrator a State implementation plan revision under section 110 and part D of title I for such area. The plan revision shall be submitted within 1 year after the classification of the area. The plan revision shall contain provisions to require that gasoline sold, supplied, offered for sale or supply, dispensed, transported or introduced into commerce be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide (as determined by the Administrator), to contain not less than 2.0 percent oxygen. The revision shall provide that such requirement shall take effect no later than October 1, 1993, and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator. The Administrator may waive, in whole or in part, the requirements of this paragraph upon a demonstration by the State to the satisfaction of the Administrator that the use of oxygenated fuels would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide. The Administrator may, upon demonstration by the State satisfactory to him, waive the requirement of this paragraph where he determines that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in an area. Notwithstanding the preceding sentences

in this paragraph, the revision described in this paragraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the carbon monoxide national ambient air quality standard by the applicable attainment date and maintenance of such standard thereafter in the area and that there is an alternative means to achieve attainment and maintain such standard thereafter in the area that is more cost effective.

(2) Serious co areas.—(A) In the case of a State in which there is located all or part of an area classified under section 186 as a Serious Area for carbon monoxide, the provisions of section 187(b)(4) of this Act shall be treated as satisfied only if the level of oxygen referred to in such provisions is at least 2.7 percent by weight.

(B) The Administrator may, in whole or in part, waive the requirements set forth in this paragraph upon a demonstration by the State to the satisfaction of the Administrator that the use of oxygenated fuels which comply with such requirement would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide.

(3) Waiver.—The Administrator may, upon demonstration by the State satisfactory to him, waive the requirement of subparagraph (A) of paragraph (2) where the Administrator determines that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in an area. Notwithstanding the requirement of subparagraph (A) of paragraph (2), the revision described in that subparagraph shall not be required for an area if the State demonstrates to the satisfaction of the Administrator that the revision is not necessary to provide for attainment of the national primary ambient air quality standard for carbon monoxide by the applicable attainment date and maintenance of such standard thereafter in the area and that there is an alternative means to achieve attainment and maintain such standard thereafter in the area that is more cost effective.

(4) Fuel dispensing systems.—Any person selling oxygenated fuel at retail pursuant to this subsection shall be required under regulations promulgated by the Administrator to label the fuel dispensing system with a notice that the fuel is oxygenated and will reduce the carbon monoxide emissions from the motor vehicle and indicate such other pertinent information for the benefit of the public.

(5) Guidelines.—The Administrator shall promulgate guidelines, within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, allowing the use of marketable oxygen credits from fuels with higher oxygen content than required to offset the sale or use of fuels with a lower oxygen content than required.

(6) Deadline adjustment.—For any area classified as a Serious Area under section 186(b), the Administrator shall adjust the deadlines referred to in this subsection where necessary.

(7) Construction.—Nothing in this subsection shall be interpreted as requiring an oxygenated fuels program in an area which is in attainment for carbon monoxide and such program is not necessary to maintain such standard thereafter in the area.

(h) Federal Government Agency Fleets.—

(1) Requirement.—The President, within 180 days after the date of the enactment of the Clean Air Act Amendments of 1990, shall initiate actions providing that each department, agency, or instrumentality of the United States operating passenger cars or light-duty trucks, or both, primarily in Serious, Severe, or Extreme ozone nonattainment areas designated under subpart 2 of part D of title I, shall ensure, subject to applicable Federal procurement and related laws and annual appropriation Acts, that the maximum number of such new vehicles purchased shall be clean-fuel fleet vehicles meeting the requirements of subsection (f) of this section and that such purchases shall meet the following minimum schedule:

(A) 30 percent of such new vehicles purchased after September 30, 1995 shall be clean-fuel vehicles meeting the requirements of subsection (f).

(B) 50 percent of such new vehicles purchased after September 30, 1996 shall be clean-fuel vehicles meeting the requirements of subsection (f).

(C) 70 percent of such new vehicles purchased after September 30, 1998 shall be clean-fuel vehicles meeting the requirements of subsection (f).

The President or the President's delegate may reduce the percentage of such vehicles specified in this paragraph for any model year if the department, agency, or instrumentality concerned demonstrates that the required percentage cannot be feasibly achieved or would impose unreasonable costs for the Government or would impair the mission of a department, agency, or instrumentality. For purposes of this subsection, the provisions of subsections (d)(2) and (d)(3) shall apply to each such department, agency, or instrumentality.

(2) Authorization of appropriations.—There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this subsection for the fiscal year ending September 30, 1993, and each fiscal year thereafter. Such funds shall be available until expended.

(3) Required operation.—The President, or the President's delegate, shall before October 1, 1992, issue regulations to ensure that a vehicle acquired pursuant to this subsection—

(A) shall be supplied with appropriate clean alternative fuel in its primary area of operation, using commercially available fueling facilities to the maximum extent practicable; and

(B) shall be operated exclusively on such fuel except when operated so as to make it impracticable to obtain such fuel.

(4) Consideration.—(A) Funds appropriated for carrying out this subsection shall be applied on a priority basis for expenditure first in areas of the United States which the President determines have the most severe air pollution problems.

(B) A Federal officer or agency responsible for deciding which types of clean fuel vehicles to acquire in order to comply with this subsection shall consider as a factor in such decision which types of vehicles yield the greatest reduction in pollutants emitted per dollar spent in meeting the mission needs of such officer or agency.

(5) Cost of vehicles to federal agency.—(A) Funds appropriated under this subsection for the acquisition of vehicles under this subsection shall be applicable only—

(i) to the portion of the cost of vehicles acquired under this subsection which exceeds the cost of comparable conventional fueled vehicles;

(ii) to the portion of the costs of fuel storage and dispensing equipment attributable to such vehicles which exceeds the costs for such purposes required for conventional fuel vehicles; and

(iii) to the portion of the costs of operating and maintaining such vehicles which exceeds the costs for such purposes required for comparable conventional fueled vehicles.

(B) The President or the President's delegate shall ensure that the cost to any Federal agency receiving vehicles under this subsection shall not exceed the cost to such agency of a comparable conventional fueled vehicle.

(6) Vehicle costs.—The incremental cost of vehicles acquired under this subsection over the cost of comparable conventional fueled vehicles shall not, consistent with applicable law, be applied to any calculation with respect to a limitation under law on the maximum cost of individual vehicles which may be acquired by the United States.

(7) Exemptions.—The requirements of this subsection shall not apply to any of the following:

(A) Vehicles being operated as an experiment in the use of alternative fuels other than alcohol, natural gas or other gaseous hydrocarbons, or electricity, or to emergency vehicles or to nonroad vehicles.

(B) Vehicles with respect to which the President or the President's delegate has claimed an exemption based on national security consideration.

(C) Vehicles being operated for emergency or law enforcement purposes.

(8) Superclean federal vehicle demonstration program.—(A) The President shall require that 10 percent of the new vehicles purchased by each department, agency, or instrumentality of the United States subject to this subsection in each of the years 1995, 1996, 1997, 1998, and 1999 shall be experimental vehicles which are designed to emit not more than 0.19 grams per mile of volatile organic compounds. Such vehicles shall operate on a diversity of alternative fuels. The certification, warranty and recall provisions of sections 206 and 207 of this title shall not apply to such vehicles.

(B) The President shall establish a program to demonstrate, test, and report on the emissions performance, durability, and reliability of the vehicles purchased under this paragraph.

(C) In making determinations under other provisions of this section regarding the technical feasibility of meeting emissions standards, the President shall take into account the results of the demonstrations, tests, and reports under subparagraph (B).

(D) Experimental vehicles purchased under this paragraph shall be considered clean fuel vehicles for purposes of meeting the requirements of this subsection and such vehicles shall be credited towards the number of clean fuel vehicles required to be purchased by departments, agencies, and instrumentalities of the United States.

(i) Vehicle Conversions.—(1) The requirements of this section may be met through the conversion of existing gasoline or diesel-powered vehicles to a clean-fuel vehicle which comply with the applicable requirements of subsection (f).

(2) The Administrator shall, consistent with the requirements of this title applicable to new vehicles, promulgate regulations governing such conversions. Such regulations shall establish criteria for such conversions which will ensure that a converted vehicle will, when operating on such clean alternative fuel, comply with the applicable standards under this section. Such regulations shall apply the provisions of sections 206, 207, 208, and 209 to such conversions with such modification of the applicable regulations implementing such sections as the Administrator deems necessary to implement this subsection. Any person who obtains a certification under this paragraph shall be considered a manufacturer for purposes of sections 206 and 207 and related enforcement provisions. Nothing in the preceding sentence shall require a person who obtains a certification under this paragraph to warrant any part or operation of a vehicle other than what is required under sections 206 and 207. Nothing in this paragraph shall serve to limit the applicability of any other warranty to unrelated parts or operations. The Secretary of Transportation shall, if necessary, promulgate rules under applicable motor vehicle laws regarding the safety of converted vehicles.

(3) The conversion from a vehicle capable of operating on gasoline or diesel fuel only to a clean-fuel vehicle shall not be considered a violation of section 203(a)(3) if such conversion complies with the regulations promulgated under this subsection.

(4) Nothing in this subsection shall be construed to require such conversions of any motor vehicle in order to achieve compliance with the requirements of subsection (b) or (f).

(j) Tank and Fuel System Safety.—The Secretary of Transportation shall, in accordance with the National Motor Vehicle Traffic Safety Act of 1966, promulgate applicable regulations regarding the safety and use of fuel storage cylinders and fuel systems, including appropriate testing and retesting, in conversions of motor vehicles.

(k) Information Collection.—For purposes of enforcing regulations implementing this section, the Administrator may, subject to the provisions of section 208(b), by regulation, require manufacturers, distributors, and retailers of motor vehicles or motor vehicle fuels to establish and maintain records, make reports, and provide information concerning the sales of—

(1) motor vehicles capable of operating on clean alternative fuel; and

(2) clean alternative fuels.

Nothing in this subsection shall be construed to limit the Administrator's authority under section 114, 206, or 208.

(l) California Vehicle Program.—In the case of ozone nonattainment areas in the State of California only, notwithstanding section 209, the State may establish more stringent standards to be applicable under subsections (b) and (f) than the standards referred to in such subsections.

(m) Reductions in Refueling Emissions.—Reductions in refueling emissions whether achieved from retail fuel dispensing facilities ('Stage II') or vehicle-based ('onboard') controls shall be considered in the determination of compliance with the reductions in ozone-forming volatile organic compounds and other substances required under this section.

(n) Reformulated Gasoline for Conventional Vehicles.—(1) Within 24 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administration shall, after holding at least one public hearing, promulgate regulations under section 211 establishing specifications for cleaner gasoline to be used in conventional gasoline fueled vehicles. Such standards shall require the greatest reduction in ozone-forming volatile organic compounds and air toxic emissions achievable through the reformulation of conventional gasoline, taking into consideration the cost of achieving such emission reductions, and health, environmental and energy impacts. The regulations may establish specifications for gasoline intended for use in vehicles manufactured to use leaded gasoline that are different from the specifications established for gasoline intended for use in vehicles manufactured to use unleaded gasoline.

(2) Use of Reformulated Gasoline in Certain Ozone Nonattainment Areas.—Beginning January 1, 1995, the Administrator shall require that such reformulated gasoline or cleaner fuels be offered for sale in all ozone nonattainment areas with a 1988 design value at or above 0.18 parts per million (as calculated by the most recent interpretation methodology issued by the United States Environmental Protection Agency before the date of the enactment of the Clean Air Act Amendments of 1990).

(o) Consultation With Department of Energy and Department of Transportation.—The Administrator shall coordinate with the Secretaries of the Department of Energy and the Department of Transportation in carrying out the Administrator's duties under this section.

SEC. 213. NONROAD ENGINES AND VEHICLES.

(a) Emissions Standards.—(1) The Administrator shall conduct a study of emissions from nonroad engines and nonroad vehicles to determine if such emissions cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such study shall be completed within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990.

(2) After notice and opportunity for public hearing, the Administrator shall determine within 12 months after completion of the study under paragraph (1), based upon the results of such study, whether emissions of carbon monoxide, oxides of nitrogen, and volatile organic compounds from new nonroad engines or nonroad vehicles are significant contributors to ozone or carbon monoxide concentrations in more than 1 area which has failed to attain the national ambient air quality standards for ozone or carbon monoxide.

(3) If the Administrator makes an affirmative determination under paragraph (2), within 18 months thereafter the Administrator shall promulgate (and from time to time revise) such regulations as the Administrator deems appropriate containing standards applicable to emissions from those classes or categories of new nonroad engines and new nonroad vehicles which in the Administrator's judgment cause, or contribute to, such air pollution, taking into account costs, noise, safety and energy factors associated with the application of technology which the Administrator determines will be available for the engines and vehicles to which such standards apply. The regulations shall apply to the useful life of the engines or vehicles (as determined by the Administrator).

(4) If the Administrator determines that any emissions from new nonroad engines or vehicles not covered by paragraph (2) significantly contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, the Administrator may promulgate (and from time to time revise) such regulations as the Administrator deems appropriate containing standards applicable to emissions from those classes or categories of new nonroad engines and new nonroad vehicles which in the Administrator's judgment cause, or contribute to, such air pollution, taking into account costs, noise, safety, and energy factors associated with the application of technology which the Administrator determines will be available for the engines and vehicles to which such standards apply. The regulations shall apply to the useful life of the engines or vehicles (as determined by the Administrator).

(b) Effective Date.—Standards under this section shall take effect at the earliest possible date considering the lead time necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period and energy and safety.

(c) Safe Controls.—Effective with respect to engines or vehicles to which standards under this section apply, no emission control device, system, or element of design shall be used in a new nonroad engine or new nonroad vehicle for purposes of complying with such standards if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function. In determining whether an unreasonable risk exists, the Administrator shall consider factors including those described in section 202(a)(4)(B).

(d) Enforcement.—The standards under this section shall be subject to sections 206, 207, 208, and 209, with such modifications of the applicable regulations implementing such sections as the Administrator deems appropriate, and shall be enforced in the same manner as standards prescribed under section 202. The Administrator shall revise or promulgate regulations as may be necessary to determine compliance with, and enforce, standards in effect under this section.

SEC. 214. MARKET-BASED ALTERNATIVE CONTROLS.

(a) Alternative Controls in Some Ozone Nonattainment Areas.—(1) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations that, to the maximum extent feasible and notwithstanding any other section of this title, allow any fuel refiner to control emissions from motor vehicle fuels by one or more means different in type or degree from, and instead of, emission control measures prescribed under this title and section 182(b)(3) (relating to stage II refueling vapor recovery), so long as the alternative control measures achieve at least the same emissions reductions (as determined by the Administrator) over the same time period as the control measures that they would replace. The regulations shall establish performance standards for motor vehicle fuels marketed in areas described under section 212(d). The Administrator shall base such performance standards on the emission reductions that, in

the Administrator's judgment, may reasonably be anticipated to result from implementation of the control measures for which motor vehicle fuel refiners may substitute alternative controls under this subsection. The regulations shall provide that any fuel refiner may substitute alternative control measures if it demonstrates, and the Administrator finds, that the combination of control measures that it would employ (including any prescribed control measures) would at least meet the performance standard applicable to it. Any fuel refiner seeking approval of alternative control measures must submit a proposal to the Administrator within 24 months of the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator must approve or disapprove any such proposal within 30 months of the date of the enactment of such Amendments. The Administrator shall publish any proposal to employ alternative control measures submitted by a fuel refiner in the Federal Register upon receipt. Such notice shall constitute a notice of proposed rulemaking on whether to approve or disapprove the proposal and be deemed to comply with the requirements concerning notice of proposed rulemaking contained in sections 553 through 557 of title 5 of the United States Code (relating to notice and comment). Until the Administrator finds that the refiner has succeeded in demonstrating that it would at least meet the performance standard, the refiner shall remain subject to all of the applicable requirements prescribed under this title. The regulations also shall provide for enforcement of alternative control measures approved under this subsection.

(2) The regulations promulgated under this subsection shall allow to the maximum extent feasible fuel refiners to demonstrate compliance with the performance standards prescribed under paragraph (1) through averaging of reductions of ozone-producing emissions among fuel refiners, and over time, so long as averaging would achieve at least the same emissions reductions (as determined by the Administrator) as would be achieved by compliance with such performance standards in the absence of such averaging. Such regulations shall not permit manufacturers to comply with the requirements of this title through averaging of emission levels required to be achieved by vehicles manufactured by such manufacturers.

(b) Nationwide Alternative Controls.—The Administrator may promulgate regulations that, notwithstanding any other section of this title, allow any fuel refiner to control emissions from motor vehicles fuels by one or more means different in type or degree from, and instead of, emission control measures prescribed under this title or section 182(b)(3) (relating to stage II refueling vapor recovery), if first it demonstrates, and the Administrator finds, that the alternative control measures it would employ would achieve at least the same emissions reductions (as determined by the Administrator) over the same time period as the control measures that they would replace. The regulations promulgated under this subsection may also permit fuel refiners and fuel marketers to demonstrate compliance with applicable control measures through averaging of reductions of ozone-producing emissions among fuel refiners and fuel marketers, and over time, so long as such averaging would achieve at least the same emissions reductions (as determined by the Administrator) as would be achieved by compliance with such performance standards in the absence of such averaging. The regulations shall also provide for enforcement of alternative control measures approved under this section.

HIGH ALTITUDE PERFORMANCE ADJUSTMENTS

Sec. 215. (a)***

* * * * *

(e) High Altitude Testing.—The Administrator shall promptly establish at least one testing center (in addition to the testing centers existing on the date of the enactment of the Clean Air Act Amendments of 1990) located at a site that represents high altitude conditions, to ascertain in a reasonable manner whether, when in actual use throughout their useful life (as determined under section 202(d)), each class or category of vehicle and engines to which regulations under section 202 apply conforms to the emissions standards established by such regulations. For purposes of this subsection, the term 'high altitude conditions' refers to high altitude as defined in regulations of the Administrator in effect as of the date of the enactment of the Clean Air Act Amendments of 1990.

DEFINITIONS FOR PART A

Sec. 216. As used in this part—

(1) The term “manufacturer” as used in sections 202, 203, 206, 207, and 208 means any person engaged in the manufacturing or assembling of [new motor vehicles or new motor vehicle engines] new motor vehicles, new motor vehicle engines, new nonroad vehicles or new nonroad engines, or importing such vehicles or engines for resale, or who acts for and is under the control of any such person in connection with the distribution of [new motor vehicles or new motor vehicle engines] new motor vehicles, new motor vehicle engines, new nonroad vehicles or new nonroad engines, but shall not include any dealer with respect to [new motor vehicles or new motor vehicle engines] new motor vehicles, new motor vehicle engines, new nonroad vehicles or new nonroad engines received by him in commerce.

* * * * *

(7) Urban bus.—The term “urban bus” has the meaning provided under regulations of the Administrator promulgated under section 202(a).

(8) Clean alternative fuel.—The term “clean alternative fuel” means any fuel (including methanol, ethanol, or other alcohols (including any mixture thereof containing 85 percent or more by volume of such alcohol with gasoline or other fuels), reformulated gasoline, diesel, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity) used in a clean-fuel vehicle (or clean-fuel fleet vehicle) that complies with the standards and requirements applicable to such vehicle under this title when using such fuel or power source.

(9) Clean-fuel vehicle and clean-fuel fleet vehicle.—The term “clean-fuel vehicle” means any motor vehicle that, when operated on clean alternative fuel, complies with the requirements of section 212(b). The term “clean-fuel fleet vehicle” has the meaning provided in subsection (f).

(10) Emissions of ozone-forming volatile organic compounds.—The term “emissions of ozone-forming volatile organic compounds” means motor vehicle exhaust and evaporative, refueling, and running loss emissions of oxygenated and nonoxygenated hydrocarbons, excluding methane, and, after such exclusion, adjusted for reactivity.

(11) Covered fleet.—The term “covered fleet” means 10 or more motor vehicles which are owned or operated by a single person. In determining the number of vehicles owned by a single person for purposes of this paragraph, all motor vehicles owned by such person, by any person which controls such person, by any person controlled by such person, and by any person under common control with such person shall be treated as owned by such person. The term “covered fleet” shall not include motor vehicles held for lease or rental to the general public, motor vehicles held for sale by motor vehicle dealers (including demonstration vehicles), motor vehicles used for motor vehicle manufacturer product evaluations or tests, law enforcement and other emergency vehicles, or nonroad vehicles.

(12) Covered fleet vehicles.—The term “covered fleet vehicles” includes only motor vehicles in a covered fleet which are centrally fueled (or capable of being centrally fueled, as determined by rule by the Administrator) and centrally maintained (or capable of being centrally maintained), in accordance with usual practices and daily operations, primarily at a facility located in the nonattainment area and provided by, and under the direct control of, the owner or operator of the covered fleet.

(13) N3Nonroad engine.—The term “nonroad engine” means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 111 or section 202.

(14) Nonroad vehicle.—The term “nonroad vehicle” means a vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.

(15) Motor vehicle or engine part manufacturer.—The term “motor vehicle or engine part manufacturer” as used in sections 207 and 208 means any person engaged in the manufacturing, assembling or rebuilding of any device, system, part, component or element of design which is installed in or on motor vehicles or motor vehicle engines.

(16)(A) Model year.—The term “model year” with reference to any specific calendar year means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year. If the manufacturer has no annual production period, the term “model year” shall mean the calendar year.

(B) For the purpose of assuring that vehicles and engines manufactured before the beginning of a model year were not manufactured for purposes of circumventing the effective date of a standard required to be prescribed by subsection (b) of section 202, the Administrator may prescribe regulations defining “model year” otherwise than as provided in subparagraph (A).

(17) Light duty vehicles and engines.—The term “light duty vehicles and engines” means new light duty motor vehicles and new light duty motor vehicle engines, as determined under regulations of the Administrator.

(18) Heavy duty vehicle.—The term “heavy duty vehicle” means a truck, bus, or other vehicle manufactured primarily for use on the public streets, roads, and highways (not including any vehicle operated exclusively on a rail or rails) which has a gross vehicle weight (as determined under regulations promulgated by the Administrator) in excess of six thousand pounds. Such term includes any such vehicle which has special features enabling off-street or off-highway operation and use.

SEC. 217. MOTOR VEHICLE COMPLIANCE PROGRAM FEES.

(a) Fee Collection.—Consistent with section 9701 of title 31, United States Code, the Administrator may promulgate (and from time to time revise) regulations establishing fees to recover all reasonable costs to the Administrator associated with—

- (1) new vehicle or engine certification under section 206(a),
- (2) new vehicle or engine compliance monitoring and testing under section 206(b), and
- (3) in-use vehicle or engine compliance monitoring and testing under section 207(c).

The Administrator may establish for all foreign and domestic manufacturers a fee schedule based on such factors as the Administrator finds appropriate and equitable and nondiscriminatory, including the number of vehicles or engines produced under a certificate of conformity.

(b) Special Treasury Fund.—Any fees collected under this section shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency's activities for which the fees were collected.

(c) Limitation on Fund Use.—Moneys in the special fund referred to in subsection (b) shall not be used until after the first fiscal year commencing after the first July 1 when fees are paid into the fund.

(d) Administrator's Testing Authority.—Nothing in this subsection shall be construed to limit the Administrator's authority to require manufacturer or confirmatory testing as provided in this part.

Part B—Aircraft Emission Standards

establishment of standards

Sec. 231. (a)(1) Within 90 days after the date of enactment of the Clean Air Amendments of 1970, the Administrator shall commence a study and investigation of emissions of air pollutants from aircraft in order to determine—

[(A) the extent to which such emissions affect air quality in air quality control regions throughout the United States, and

[(B) the technological feasibility of controlling such emissions.

[(2)] (1) The Administrator shall, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.

[(3)] (2) The Administrator shall hold public hearings with respect to such proposed standards. Such hearings shall, to the extent practicable, be held in air quality control regions which are most seriously affected by aircraft emissions. Within 90 days after the issuance of such proposed regulations, he shall issue such regulation with such modifications as he deems appropriate. Such regulations may be revised from time to time.

* * * * *

TITLE III—GENERAL

administration

Sec. 301. (a)(1) The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this Act. The Administrator may delegate to any officer or employee of the Environmental Protection Agency such of his powers and duties under this Act, except the making of regulations subject to section 307(d), as he may deem necessary or expedient.

* * * * *

(d) Tribal Authority.—(1) Subject to the provisions of paragraph (2), the Administrator—

(A) is authorized to treat Indian tribes as States under this Act, except for purposes of the requirement that makes available for application by each State no less than one-half of 1 percent of annual appropriations under section 105; and

(B) may provide any such Indian tribe grant and contract assistance to carry out functions provided by this Act.

(2) The Administrator shall promulgate regulations within 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, specifying those provisions of this Act for which it is appropriate to treat Indian tribes as States. Such treatment shall be authorized only if—

(A) the Indian tribe has a governing body carrying out substantial governmental duties and powers;

(B) the functions to be exercised by the Indian tribe pertain to the management and protection of air resources within the exterior boundaries of the reservation or other areas within the tribe's jurisdiction; and

(C) the Indian tribe is reasonably expected to be capable, in the judgment of the Administrator, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this Act and all applicable regulations.

(3) The Administrator may promulgate regulations which establish the elements of tribal implementation plans and procedures for approval or disapproval of tribal implementation plans and portions thereof.

(4) In any case in which the Administrator determines that the treatment of Indian tribes as identical to States is inappropriate or administratively infeasible, the Administrator may provide, by regulation, other means by which the Administrator will directly administer such provisions so as to achieve the appropriate purpose.

(5) Until such time as the Administrator promulgates regulations pursuant to this subsection, the Administrator may continue to provide financial assistance to eligible Indian tribes under section 105.

DEFINITIONS

Sec. 302. When used in this Act—

(a) The term “Administrator” means the Administrator of the Environmental Protection Agency.

(b) The term “air pollution control agency” means any of the following:

(1) A single State agency designated by the Governor of that State as the official State air pollution control agency for purposes of this Act[;].

(2) An agency established by two or more States and having substantial powers or duties pertaining to the prevention and control of air pollution[;].

(3) A city, county, or other local government health authority, or, in the case of any city, county, or other local government in which there is an agency other than the health authority charged with responsibility for enforcing ordinances or laws relating to the prevention and control of air pollution, such other agency[; or].

(4) An agency of two or more municipalities located in the same State or in different States and having substantial powers or duties pertaining to the prevention and control of air pollution.

(5) An agency of an Indian tribe.

* * * * *

(g) The term “air pollutant” means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term “air pollutant” is used.

(h) All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

* * * * *

(q) For purposes of this Act, the term “applicable implementation plan” means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110, or promulgated under

section 110(c), or promulgated or approved pursuant to regulations promulgated under section 301(d) and which implements the relevant requirements of this Act.

(r) Indian Tribe.—The term “Indian tribe” means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village, which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

(s) VOC.—The term “VOC” means volatile organic compound, as defined by the Administrator.

(t) PM-10.—The term “PM-10” means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers, as measured by such method as the Administrator may determine.

(u) NAAQS and CTG.—The term “NAAQS” means national ambient air quality standard. The term “CTG” means a Control Technique Guideline published by the Administrator under section 108.

(v) NO_{5x}.—THE TERM “NO_{5x}” MEANS OXIDES OF NITROGEN.

(w) CO.—The term “CO” means carbon monoxide.

(x) Small Source.—The term “small source” means a source that emits less than 100 tons of regulated pollutants per year, or any class of persons that the Administrator determines, through regulation, generally lack technical ability or knowledge regarding control of air pollution.

(y) Federal Implementation Plan.—The term “Federal implementation plan” means a plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan, and which includes enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as fees, marketable permits, or auctions of emissions allowances), and provides for attainment of the relevant national ambient air quality standard.

(z) Stationary Source.—The term “stationary source” means generally any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 216.

EMERGENCY POWERS

Sec. 303. [(a)] Notwithstanding any other provisions of this Act, the Administrator upon receipt of evidence that a pollution source or combination of sources (including moving sources) is presenting an imminent and substantial endangerment to [the health of persons,] public health or welfare, or the environment and that appropriate State or local authorities have not acted to abate such sources or have not acted adequately to abate such sources, may bring suit on behalf of the United States in the appropriate United States district court to immediately restrain any person causing or contributing to the alleged pollution to stop the emission of air pollutants causing or contributing to such pollution or to take such other action as may be necessary. [If it is not practicable to assure prompt protection of the health of persons solely by commencement of such a civil action, the Administrator may issue such orders as may be necessary to protect the health of persons who are, or may be, affected by such pollution source (or sources).] If it is not practicable to assure prompt protection of public health or welfare or the environment by commencement of such a civil action, the Administrator may issue such orders as may be necessary to protect public health or welfare or the environment. Prior to taking any action under this section, the Administrator shall consult with the State and local authorities in order to confirm the correctness of the information on which the action proposed to be taken is based and to ascertain the action which such authorities are, or will be, taking. [Such order shall be effective for a period of not more than twenty-four hours unless the Administrator brings an action under the first sentence of this subsection before the expiration of

such period. Whenever the Administrator brings such an action within such period, such order shall be effective for a period of forty-eight hours or such longer period as may be authorized by the court pending litigation or thereafter.

[(b) Any person who willfully violates, or fails or refuses to comply with, any order issued by the Administrator under subsection (a) may, in an action brought in the appropriate United States district court to enforce such order, be fined not more than \$5,000 for each day during which such violation occurs or failure to comply continues.]

* * * * *

citizen suits

Sec. 304. (a) Except as provided in subsection (b), any person may commence a civil action on his own behalf—

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to be in violation of (A) an emission standard or limitation under this Act or (B) an order issued by the Administrator or a State with respect to such a standard or limitation,

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act which is not discretionary with the Administrator, or

(3) against any person who proposes to construct or constructs any new or modified major emitting facility without a permit required under part C of title I (relating to significant deterioration of air quality) or part D of title I (relating to nonattainment) or who is alleged to be in violation of any condition of such permit.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an emission standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties (except for actions under paragraph (2)).

* * * * *

(c)(1)***

[(2) In such action under this section, the Administrator, if not a party, may intervene as a matter of right.]

(2) In any action under this section, the Administrator, if not a party, may intervene as a matter of right at any time in the proceeding. A judgment in an action under this section to which the United States is not a party shall not, however, have any binding effect upon the United States.

(3) Whenever any action is brought under this section the plaintiff shall serve a copy of the complaint on the Attorney General of the United States and on the Administrator. No consent judgment shall be entered in an action brought under this section in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the Attorney General and the Administrator during which time the Government may submit its comments on the proposed consent judgment to the court and parties or may intervene as a matter of right.

* * * * *

(g) Penalty Fund.—Penalties received under subsection (a) shall be deposited in a special fund in the United States Treasury for licensing and other services. Amounts in such fund and authorized to be appropriated shall remain available until expended, for use by the Administrator to finance air compliance and enforcement activities. The Administrator shall annually report to the Congress about the sums deposited into the fund, the sources thereof, and the actual and proposed uses thereof.

* * * * *

federal procurement

Sec. 306. (a) No Federal agency may enter into any contract with any person who is convicted of any offense under section [113(c)(1)] 113(c), 205(d), 211(d)(3), and 212(e) for the procurement of goods, materials, and services to perform such contract at any facility at which the violation which gave rise to such conviction occurred if such facility is owned, leased, or supervised by such person. The prohibition in the preceding sentence shall continue until the Administrator certifies that the condition giving rise to such a conviction has been corrected. For convictions arising under section 113(c)(2), the condition giving rise to the conviction also shall be considered to include any substantive violation of this Act associated with the violation of 113(c)(2). The Administrator may extend this prohibition to other facilities owned or operated by the convicted person.

* * * * *

general provisions relating to administrative proceedings and judicial review

Sec. 307. (a)***

(b)(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under section 112, any standard of performance or requirement under section 111, any standard under section 202 (other than a standard required to be prescribed under section 202(b)(1)), any determination under section 202(b)(5), any control or prohibition under section 211, any standard under section 231, any rule issued under section 113, 119, or under section 120, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this Act may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under section 110 or section 111(d), any order under section 111(j), under section 112(c), under section 113(d), under section 119, or under section 120, or his action under section 119(c)(2) (A), (B), or (C) (as in effect before the date of enactment of the Clean Air Act Amendments of 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under section 114(a)(3) of this Act, or any other final action of the Administrator under this Act (including any denial or disapproval by the Administrator under title I) which is local or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of Columbia if such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

* * * * *

(d)(1) This subsection applies to—

(A) the promulgation or revision of any national ambient air quality standard under section 109,

(B) the promulgation or revision of an implementation plan by the Administrator under section 110(c),

[(C) the promulgation or revision of any standard of performance under section 111 or emission standard under section 112,]

(C) the promulgation or revision of any standard of performance under section 111, or emission standard or limitation under section 112(d), any standard under section 112(f), or any regulation under section 112(g)(1)(D) and (F), or any regulation under section 112(m) or (n),

* * * * *

[(F) promulgation or revision of regulations pertaining to orders for coal conversion under section 113(d)(5) (but not including orders granting or denying any such orders),]

(F) the promulgation or revision of any regulation under title V (relating to control of acid deposition),

* * * * *

(M) action of the Administrator under section 126 (relating to interstate pollution abatement), [and]

(N) the promulgation or revision of any regulation pertaining to consumer and commercial products under section 183(e),

(O) the promulgation or revision of any regulation pertaining to field citations under section 113(d)(3),

(P) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under section 212,

(Q) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under section 213,

(R) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under section 217,

(S) the promulgation or revision of any regulation pertaining to market-based alternative controls under section 214, the promulgation or revision of any regulation under title IV,

(T) the promulgation or revision of any regulation under section 183(f) pertaining to marine vessels, and

[(N)] (U) such other actions as the Administrator may determine.

* * * * *

(h) Reports.—No report required by this Act to be submitted to Congress shall be subject to judicial review.

(i) Public Participation.—It is the intent of Congress that, consistent with the policy of the Administrative Procedures Act, the Administrator in promulgating any regulation under this Act, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in section 107(d), 172(a), 181(a) and (b), and 186(a) and (b).

* * * * *

[additional reports to congress

[Sec. 313. Not later than six months after the effective date of this section and not later than January 10 of each calendar year beginning after such date, the Administrator shall report to the Congress on measures taken toward implementing the purpose and intent of this Act including, but not limited to, (1) the progress and problems associated with control of automotive exhaust emissions and the research efforts related thereto; (2) the development of air quality criteria and recommended emission control requirements; (3) the status of enforcement actions taken pursuant to this Act; (4) the status of State ambient air standards setting, including such plans for implementation and enforcement as have been developed; (5) the extent of development and expansion of air pollution monitoring systems; (6) progress and problems related to development of new and improved

control techniques; (7) the development of quantitative and qualitative instrumentation to monitor emissions and air quality; (8) standards set or under consideration pursuant to title II of this Act; (9) the status of State, interstate, and local pollution control programs established pursuant to and assisted by this Act; (10) the reports and recommendations made by the President's Air Quality Advisory Board; and (11)(A) the status of plan provisions developed by States as required under section 110(a)(2)(F) (v), and an accounting of States failing to develop suitable plans; (B) the number of annual incidents of air pollution reaching or exceeding levels determined to present an imminent and substantial endangerment to health (within the meaning of section 303) by location, date, pollution source, and the duration of the emergency; (C) measures taken pursuant to section 110(a)(2) (F)(v), and an evaluation of their effectiveness in reducing pollution; and (D) an accounting of those instances in which an air pollution alert, warning, or emergency is declared as required under regulations of the Administrator and in which no action is taken by either the Administrator, State, or local officials, together with an explanation for the failure to take action.]

* * * * *

[financial disclosure; conflicts of interest

[Sec. 318. (a) Each person who—

[(1) has any known financial interest in (A) any person subject to this Act, or (B) any person who applies for or receives any grant, contract, or other form of financial assistance pursuant to this Act, and

[(2) is (A) an officer or employee of the Environmental Protection Agency who performs any function of duty under this Act, (B) a member of the National Commission on Air Quality appointed as a member of the public, or (C) a member of the scientific review committee under section 109(d)

shall, beginning six months after the date of enactment of this section, annually file with the Administrator, a written statement concerning all such interests held by such officer, employee, or member during the preceding calendar year. Such statement shall be available to the public.

[(b) The Administrator shall—

[(1) act within ninety days after the date of enactment of the Clean Air Act Amendments of 1977—

[(A) to define the term “known financial interest” for purposes of subsection (a) of this section;

[(B) to establish the methods by which the requirement to file written statements specified in subsection (a) of this section will be monitored and enforced, including appropriate provisions for the filing by such officers, employees and members of such statements and the review by the Administrator (or the Commission in the case of members of the Commission) of such statements; and

[(2) report to the Congress on June 1 of each calendar year with respect to such statements to the Administrator and the actions taken in regard thereto during the preceding calendar year.

[(c) After the date one year after the date of the enactment of this section, no person who—

[(1) is employed by, serves as attorney for, acts as a consultant for, or holds any other official or contractual relationship to—

[(A) the owner or operator of any major stationary source or any stationary source which is subject to a standard of performance or emission standard under section 111 or 112,

[(B) any manufacturer of any class or category of mobile sources if such mobile sources are subject to regulation under this Act,

[(C) any trade or business association of which such owner or operator referred to in subparagraph (A) or such manufacturer referred to in subparagraph (B) is a member, or

[(D) any organization (whether or not nonprofit) which is a party to litigation, or engaged in political, educational, or informational activities, relating to air quality, or

[(2) owns, or has any financial interest in, any stock, bonds, or other financial interest which ownership or interest may be inconsistent with a position as an officer or employee of the Environmental Protection Agency, as determined under regulations of the Administrator,

may concurrently serve as such an officer or employee of the Environmental Protection Agency.

[(d) The Administrator shall promulgate rules for purposes of subsections (b) and (c) which—

[(1) identify specific offices or positions within such agency which are of a nonregulatory or nonpolicymaking nature and provide that officers or employees occupying such positions shall be exempt from the requirements of this section, and

[(2) identify the ownership or financial interests which may be inconsistent with particular regulatory or policymaking offices or positions within the Environmental Protection Agency.

[(e) Any officer or employee of the Environmental Protection Agency or member of the National Commission on Air Quality or of the scientific review committee under section 109(d) who is subject to, and knowingly violates, this section or any regulation issued thereunder, shall be fined not more than \$2,500 or imprisoned not more than one year, or both.

[(f) Nothing in this section shall be construed to affect or impair any other Federal statutory requirements respecting disclosure or conflict of interest applicable to the Environmental Protection Agency. Subsections (c) and (d) of this section shall not apply after the effective date of any such requirements respecting conflicts of interest which are generally applicable to departments, agencies, and instrumentalities of the United States.]

* * * * *

Sec. 324. (a)(1) Upon petition by the governor of Guam, American Samoa, the Virgin Islands, or the Commonwealth of the Northern Mariana Islands, the Administrator is authorized to exempt any person or source or class of persons or sources in such territory from any requirement under this Act other than section 112 or any requirement under section 110 or part D necessary to attain or maintain a national primary ambient air quality standard. Such exemption may be granted if the Administrator finds that compliance with such requirement is not feasible or is unreasonable due to unique geographical, meteorological, or economic factors of such territory, or such other local factors as the Administrator deems significant. Any such petition shall be considered in accordance with section 307(d) and any exemption under this subsection shall be considered final action by the Administrator for the purposes of section 307(b).

* * * * *

SEC. 325A. UNITED STATES-MEXICO AIR QUALITY.

(a) Establishment of Office.—In coordination with the Secretary of State, the Administrator shall establish in the Office of International Activities a United States-Mexico Air Quality Office to be under the direction of a Director for United States-Mexico Air Quality affairs (hereinafter in this section referred to as the Director).

(b) Duties of Director.—In addition to such other air quality duties as may be delegated to the Director, the Director shall have the responsibility to carry out each of the following:

(1) A binational study of the prospects in Mexico for clean fuel automobiles and clean fuels (especially natural gas given Mexico's competitive advantage in this area).

(2) A study on the possibility of standardized regulations between the United States and Mexico on air quality to contribute to greater coordination between the two jurisdictions.

[appropriations

[Sec. 327. (a) There are authorized to be appropriated to carry out this Act (other than provisions for which amounts are authorized under subsection (b)), \$200,000,000 for the fiscal year 1978 and for each of the three fiscal years beginning thereafter.

[(b)(1) There are authorized to be appropriated to carry out section 175 beginning in fiscal year 1978, \$75,000,000 to be available until expended.

[(2) There are authorized to be appropriated for use in carrying out section 323 (relating to National Commission on Air Quality), not to exceed \$10,000,000 beginning in fiscal year 1978. For the study authorized under section 323 there shall be made available by contract to the National Commission on Air Quality from the appropriation to the Environmental Protection Agency for fiscal year 1977 the sum of \$1,000,000.

[(3) There are authorized to be appropriated to carry out section 127 (relating to grants for public notification) \$4,000,000 for the fiscal year 1978 and each of the three succeeding fiscal years.

[(4) For purposes of section 103(a)(5), there are authorized to be appropriated \$7,500,000 for the fiscal year 1978 and each of the three fiscal years beginning after the date of enactment of the Clean Air Act Amendments of 1977.

[(5) For the purpose of carrying out the provisions of part B of title I relating to studies and reports, there are authorized to be appropriated—

[(A) to the National Aeronautics and Space Administration, the National Science Foundation, and the Department of State, such sums as may be necessary for the fiscal year ending September 30, 1977, and the fiscal year ending September 30, 1978;

[(B) to the Environmental Protection Agency, \$157,000,000 for fiscal year 1978; and

[(C) to all other agencies such sums as may be necessary.

(6) There are authorized to be appropriated for carrying out research, development and demonstration under sections 103 and 104 of this Act \$120,000,000 for fiscal year 1978.]

SEC. 327. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to carry out this Act such sums as may be necessary.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 401. DEFINITIONS.

As used in this title—

(1) Affected source.—The term “affected source” shall have the meaning given such term in title V.

(2) Major source.—The term “major source” means any stationary source (or any group of stationary sources located within a contiguous area and under common control) that is either of the following:

(A) A major source as defined in section 112.

(B) A major stationary source as defined in section 302 or part D of title I.

(3) Terms defined in section 112.—For sources subject to standards under section 112, the terms “new source”, “stationary source”, and “area source” shall have the meaning given such terms in that section.

(4) Terms defined in section 111.—For sources subject to standards under section 111, the terms “new source”, “modification”, “existing source”, and “stationary source” shall have the meaning given such terms in that section.

(5) Schedule of compliance.—The term “schedule of compliance” means a schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance with an applicable implementation plan, emission standard, emission limitation or emission prohibition.

(6) Permitting authority.—The term “permitting authority” means the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this title.

SEC. 402. PERMIT PROGRAMS.

(a) Violations.—After the effective date of any permit program approved or promulgated under this title, it shall be unlawful for any person to violate any requirement of a permit issued under this title, or to operate an affected source (as provided in title V), a major source, any other source (including an area source) subject to standards or regulations under sections 111 or 112, any source required to have a permit under parts C or D, or any other stationary source designated by regulations promulgated by the Administrator, except in compliance with a permit issued by a permitting authority under this title. Nothing in this subsection shall be construed to alter the requirements of section 165, 172, and 173 regarding the requirement that a permit be obtained before construction. The Administrator may, in the Administrator's discretion, promulgate regulations to exempt one or more source categories from the requirements of this subsection if the Administrator finds that such an exemption would be consistent with the purposes of this Act.

(b) Regulations.—The Administrator shall promulgate within 12 months after the date of the enactment of the Clean Air Act Amendments of 1990 regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These elements shall include each of the following:

(1) Requirements for permit applications, including a standard application form and criteria for determining in a timely fashion the completeness of applications.

(2) Monitoring and reporting requirements.

(3)(A) A requirement under State law that the owner or operator of all sources subject to the requirement to obtain a permit under this title pay an annual fee, or the equivalent over some other period, sufficient to cover all reasonable costs of developing and administering the permit program, including the reasonable costs of—

(i) reviewing and acting upon any application for such a permit,

(ii) if the owner or operator receives a permit for such source, whether before or after the date of the enactment of the Clean Air Act Amendments of 1990, implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

(iii) emissions and ambient monitoring,

(iv) preparing generally applicable regulations, or guidance,

(v) modeling, analyses, and demonstrations, and

(vi) preparing inventories and tracking emissions.

(B) The total amount of fees collected by the permitting authority shall conform to the following requirements:

(i) The Administrator shall not approve a program as meeting the requirements of this paragraph unless the State demonstrates that, except as otherwise provided in subparagraphs (ii) through (v) of this subparagraph, the program will result in the collection, in the aggregate, from all sources subject to subparagraph (A), of an amount not less than \$25 per ton of each regulated pollutant, or such other amount as the Administrator may determine adequately reflects the reasonable costs of the permit program.

(ii) As used in this subparagraph, the term "regulated pollutant" shall mean (I) a volatile organic compound; (II) each pollutant regulated under section 111 or 112; and (III) each pollutant for which a national primary ambient air quality standard has been promulgated (except that carbon monoxide shall be excluded from this reference).

(iii) In determining the amount under clause (i), the permitting authority is not required to include any amount of regulated pollutant emitted by any source in excess of 4,000 tons per year of that regulated pollutant.

(iv) The requirements of clause (i) shall not apply if the permitting authority demonstrates that collecting an amount less than the amount specified under clause (i) will meet the requirements of subparagraph (A).

(v) The fee calculated under clause (i) shall be increased (consistent with the need to cover reasonable costs) in each year beginning after the year of the enactment of the Clean Air Act Amendments of 1990 by the percentage, if any, by which the Consumer Price Index for the most recent calendar year ending before the beginning of such year exceeds the Consumer Price Index for the calendar year 1989. For purposes of this clause—

(I) the Consumer Price Index for any calendar year is the average of the Consumer Price Index for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year, and

(II) the revision of the Consumer Price Index which is most consistent with the Consumer Price Index for calendar year 1989 shall be used.

(C)(i) If the Administrator determines, under subsection (d), that the fee provisions of the operating permit program do not meet the requirements of this paragraph, or if the Administrator makes a determination, under subsection (i), that the permitting authority is not adequately administering or enforcing an approved fee program, the Administrator may, in addition to taking any other action authorized under this title, collect reasonable fees from the sources identified under subparagraph (A) without regard to the requirements of subparagraph (B).

(ii) Any source that fails to pay fees lawfully imposed by the Administrator under this subparagraph shall pay a penalty of 50 percent of the fee amount, plus interest on the fee amount computed in accordance with section 6621(a)(2) of the Internal Revenue Code of 1986 (relating to computation of interest on underpayment of Federal taxes).

(iii) Any fees, penalties, and interest collected under this subparagraph shall be deposited in a special fund in the United States Treasury for licensing and other services, which thereafter shall be available for appropriation, to remain available until expended, subject to appropriation, to carry out the Agency's activities for which the fees were collected. Any fee required to be collected by a State or interstate agency under this subsection shall be utilized solely to support the air pollution control permit program of such State or interstate agency as provided in this paragraph.

(4) Requirements for adequate personnel and funding to administer the program.

(5) A requirement that the permitting authority have adequate authority to:

(A) issue permits and assure compliance by all sources required to have a permit under this title with each applicable standard, regulation or requirement under this Act;

(B) issue permits for a fixed term, not to exceed 5 years;

(C) assure that upon issuance or renewal permits incorporate emission limitations and other requirements in an applicable implementation plan;

(D) terminate, modify, or revoke and reissue permits for cause; and

(E) enforce permits, permit fee requirements, and the requirement to obtain a permit, including authority to recover civil penalties in an amount not less than \$10,000 per day for each violation, and appropriate criminal penalties.

(6) Adequate, streamlined, and reasonable procedures for expeditiously determining when applications are complete and for processing such applications for public notice, including offering an opportunity for public comment and a hearing, and for expeditious review of permit actions, including applications.

(7) Authority to make available to the public any permit application, compliance plan, permit, and monitoring or compliance report under section 403(e), subject to the provisions of section 114(c) of this Act.

(c) Single Permit.—A single permit may be issued for a facility with multiple sources.

(d) Submission and Approval.—Not later than 3 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Governor of each State shall develop and submit to the Administrator a permit program under State law or under an interstate compact meeting the requirements of this title. In addition, the Governor shall submit a legal opinion from the attorney general (or the attorney for those State air pollution control agencies that have independent legal counsel), or from the chief legal officer of an interstate agency, that the laws of the State, locality, or the interstate compact provide adequate authority to carry out the program. Not later than 1 year after receiving a program, and after notice and opportunity for public comment, the Administrator shall approve or disapprove such program, in whole or in part. The Administrator may approve a program to the extent that the program meets the requirements of this Act, including the regulations issued under subsection (b). If the program is disapproved, in whole or in part, the Administrator shall notify the Governor of any revisions or modifications necessary to obtain approval. The Governor shall revise and resubmit the program for review under this section within 180 days after receiving notification. If the Governor fails within such period to resubmit an approvable program, the Administrator—

(1) shall, to the extent the permit program would implement an applicable implementation plan, withhold final action on plan revisions affecting one, or a small group of, major sources; and

(2) may in the Administrator's discretion take either or both of the following actions:

(A) apply any of the sanctions specified in section 179(b) of this Act other than the sanction specified in section 179(b)(2); or

(B) promulgate a program, or partial program, under this title.

(e) Suspension.—The Administrator shall suspend the issuance of permits promptly upon publication of notice of approval of a permit program under this section, but may, in such notice, retain jurisdiction over permits that have been federally issued, but for which the administrative or judicial review process is not complete. The Administrator shall continue to administer and enforce federally issued permits under this title until they are replaced by a permit issued by a permitting program. Nothing in this subsection should be construed to limit the Administrator's ability to enforce permits issued by a State.

(f) Partial Permit Program.—The Governor of a State may submit, and the Administrator may approve, a partial permit program. No partial permit program shall be approved unless, at a minimum, it applies, and ensures compliance with, this title and each of the following:

(1) All requirements established under title V applicable to “affected sources”.

(2) All requirements established under section 112 applicable to “major sources”, “area sources,” and “new sources”.

(3) All requirements of title I (other than section 112) applicable to sources required to have a permit under this title.

Approval of a partial program shall not relieve the State of its obligation to submit a complete program, nor from the application of any sanctions under this Act for failure to submit an approvable permit program.

(g) Interim Approval.—If a program (including a partial permit program) submitted under this title substantially meets the requirements of this title, but is not fully approvable, the Administrator may by rule grant the program interim approval. In the notice of final rulemaking, the Administrator shall specify the changes that must be made before the program can receive full approval. An interim approval under this subsection shall expire on a date set by the Administrator not later than 2 years after such approval, and may not be renewed.

(h) Effective Date.—The effective date of a permit program, or partial or interim program, approved under this title, shall be the effective date of approval by the Administrator.

(i) Administration and Enforcement.—Whenever the Administrator makes a preliminary determination that a permitting authority is not adequately administering and enforcing a program, or portion thereof, in accordance with the requirements of this title, the Administrator shall notify the permitting authority of such determination and the reasons therefor. Such notice shall be made public. If the permitting authority fails to take action to assure adequate administration and enforcement, the Administrator may in the Administrator's discretion, but not before 90 days after issuing such notice, take one or more of the following actions—

(1) withdraw approval of the program or portion by rule;

(2) propose to apply any of the sanctions specified in section 179(b) of this Act other than the sanction specified in section 179(b)(2); or

(3) promulgate a program, or portion of a program, under this title.

SEC. 403. PERMIT APPLICATIONS.

(a) **Applicable Date.**—Any source specified in section 402(a) shall become subject to a permit program, and required to have a permit, on the later of the following dates—

- (1) the effective date of a permit program or partial or interim permit program applicable to the source; or
- (2) the date such source becomes subject to section 402(a).

(b) **Compliance Plan.**—(1) The regulations required by section 402(b)(1) shall include a requirement that there is submitted with the permit application a compliance plan describing how the source will comply with all applicable requirements under this Act. The compliance plan shall include a schedule of compliance, and a schedule under which the permittee will submit progress reports to the permitting authority no less frequently than every 6 months.

(2) The regulations shall further require the permittee to periodically certify that the facility is in compliance with any applicable requirements of the permit, and to promptly report, consistent with provisions of the United States Constitution regarding self-incrimination, any violations of such requirements to the permitting authority.

(c) **Deadline.**—Any person required to have a permit shall, not later than 12 months after the date on which the source becomes subject to a permit program approved or promulgated under this title, or such earlier date as the permitting authority may establish, submit to the permitting authority a compliance plan and an application for a permit signed by a responsible corporate official, who shall certify the accuracy of the information submitted.

(d) **Timely and Complete Applications.**—Except for sources required to have a permit before construction under sections 165, 172, or 173, if an applicant has submitted a timely and complete application for a permit required by this title, but final action has not been taken on such application, the source's failure to have a permit shall not be a violation of this Act, unless the delay in final action was due to the failure of the applicant timely to submit information required or requested to process the application. No source required to have a permit under this title shall be in violation of section 402(a) before the date on which the source is required to submit an application under subsection (c).

(e) **Copies; Availability.**—A copy of each permit application, compliance plan, emissions or compliance monitoring report, certification, and each permit issued under this title, shall be available to the public. If an applicant or permittee is required to submit information entitled to protection from disclosure under section 114(c) of this Act, the applicant or permittee may submit such information separately. The requirements of section 114(c) shall apply to such information. The contents of a permit shall not be entitled to protection under section 114(c).

SEC. 404. PERMIT REQUIREMENTS AND CONDITIONS.

(a) **Conditions.**—Each permit issued under this title shall include emission limitations and standards, a schedule of compliance, and such other conditions as are necessary to assure compliance with applicable requirements.

(b) **Monitoring and Analysis.**—The Administrator may by rule prescribe procedures and methods for determining compliance and for monitoring and analysis of pollutants regulated under this Act.

(c) **Inspection Entry, Monitoring Certification and Reporting.**—Each permit issued under this title shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and

conditions. Such monitoring and reporting requirements shall conform to any applicable regulation under subsection (b). Any report required to be submitted by a permit issued to a corporation under this title shall be signed by a responsible corporate official, who shall certify its accuracy.

(d) General Permits.—The permitting authority may, after notice and opportunity for public hearing, issue a general permit covering numerous similar sources. Any general permit shall comply with all requirements applicable to permits under this title. No source covered by a general permit shall thereby be relieved from the obligation to file an application under section 403.

(e) Temporary Sources.—The permitting authority may issue a single permit authorizing emissions from similar operations at multiple temporary locations. No such permit shall be issued unless it includes conditions that will assure compliance with all the requirements of this Act at all authorized locations, including ambient standards and compliance with any applicable increment or visibility requirements under part C of title I. Any such permit shall in addition require the owner or operator to notify the permitting authority in advance of each change in location. The permitting authority may require a separate permit fee for operations at each location.

(f) No Less Stringent Requirement.—(1) A permit may not be reissued or modified to contain emission limitations or other requirements that are less stringent than the comparable emission limitations or requirements in the previous permit or that applied to the source under an applicable implementation plan.

(2) Notwithstanding paragraph (1) of this subsection, a permit may be reissued or modified, in accordance with section 405 of this title, to contain a less stringent emission limitation or other requirement (other than standards established under section 111 or 112) if the applicant shows that the revised emission limitation or requirement is consistent with any demonstration of attainment and any progress requirement in an approved implementation plan, the requirements of part C or section 173 of the Act, and will not otherwise interfere with attainment of the ambient air quality standards, progress requirements, and any other requirements of this Act and that—

(A) the increased emissions authorized by the permit are compensated for by emissions reductions from another permitted facility, as determined under rules prescribed by the Administrator;

(B) material and substantial alterations or additions to the permitted source occurred after permit issuance;

(C) information is available that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and that, if known, would have justified the application of a less stringent emission limitation or requirement at that time;

(D) technical mistakes or mistaken interpretations of law were made in issuing the permit; or

(E) the permittee demonstrates, in accordance with procedures prescribed by the Administrator, that it has installed the controls required to meet the emission limitations and requirements in the permit and has properly constructed and tested the facility, but has nevertheless been unable to achieve the emission limitations specified in the permit, in which case the limitations in the revised, reissued, or modified permit may reflect the level of emission control actually achieved.

(3) No permit may be reissued to contain emission standards less stringent than those established under sections 111 or 112 and applicable to the source unless the applicable standard has been revised, or, for a standard under section 112, an alternative emission limitation has been established under section 112(g).

(g) Compliance.—Compliance with a permit issued under this title shall be deemed compliance with section 402. Except as otherwise provided by the Administrator by rule, the permit may also provide that compliance with the permit shall be

deemed compliance with other applicable provisions of this Act. The preceding sentence shall not apply in the case of a standard issued under section 112(f). Compliance with a permit issued under a partial program under section 402(f) shall be deemed compliance only with those requirements for which the program was approved.

SEC. 405. NOTIFICATION TO ADMINISTRATOR AND CONTIGUOUS STATES.

(a) Transmission and Notice.—(1) Each permitting authority shall transmit to the Administrator a copy of each permit application, including any compliance plan and any application for alternative emission limitations under section 112(g), or for a permit modification, submitted under this title, and shall provide notice, in accordance with regulations promulgated by the Administrator, of every action related to the consideration of the application, including each permit proposed to be issued by the authority.

(2) The permitting authority shall notify all States contiguous to the State in which the emission originates of each permit application, and each draft permit or proposed permit forwarded to the Administrator under this section, and shall provide an opportunity for such States to submit written recommendations respecting the issuance of the permit and its terms and conditions. If any part of those recommendations are not accepted by the permitting authority, such authority shall notify the State submitting the recommendations and the Administrator in writing of its failure to accept those recommendations and the reasons therefor.

(b) Objection by EPA.—The permitting authority shall respond in writing if the Administrator (1) within 45 days after receipt of the proposed permit under subsection (a)(1), or (2) within 45 days after receiving notification under subsection (a)(2), objects in writing to its issuance as not in compliance with the requirements of this Act, including the requirements of section 110(a)(2)(D). With the objection, the Administrator shall provide a statement of the reasons for the objection. A copy of the objection and statement shall be provided to the applicant.

(c) Issuance or Denial.—If the permitting authority fails within 90 days after the date of an objection under subsection (b), to submit a permit revised to meet the objection, the Administrator shall issue or deny the permit in accordance with the requirements of this title. No objection shall be subject to judicial review until the Administrator takes final action to issue or deny a permit under this subsection.

(d) Waiver of Notification Requirement.—(1) The Administrator may waive the requirements of subsections (a) and (b) at the time of approval of a permit program under this title for any category (including any class, type, or size within such category) of sources covered by the program.

(2) The Administrator may, by regulation, establish categories of sources (including any class, type, or size within such category) to which the requirements of subsections (a) and (b) shall not apply.

(3) The Administrator may exclude from any waiver under this subsection notification under paragraph (a)(2). Any waiver granted under this subsection may be revoked or modified by the Administrator by rule.

(e) Refusal of Permitting Authority To Terminate, Modify, or Revoke and Reissue.—If the Administrator finds that cause exists under section 402(b)(5)(D) to terminate, modify, or revoke and reissue a State permit under this title, the Administrator shall notify the permitting authority and the source of the Administrator's finding. The permitting authority shall, within 90 days after receipt of such notification, forward to the Administrator under this section a proposed determination of termination, modification, or revocation and reissuance, as appropriate. The Administrator may extend such 90 day period for an additional 90 days if the Administrator finds that a new or revised permit application is necessary, or that the permitting authority must require the permittee to submit additional information. The Administrator may review such proposed determination under the provisions of subsections (a) and (b). If the permitting authority fails to submit the required proposed determination, or if

the Administrator objects and the permitting authority fails to resolve the objection within 90 days, the Administrator may, after notice and in accordance with fair and reasonable procedures, terminate, modify, or revoke and reissue the permit.

SEC. 406. OTHER AUTHORITIES.

(a) State or Interstate Authorities.—Nothing in this title shall prevent a State, or interstate permitting authority, from establishing additional permitting requirements not inconsistent with this Act.

(b) Acid Deposition Program.—Nothing in this title shall be construed to authorize the Administrator, or a State, to modify or revoke any allowance granted under title V.

SEC. 407. SMALL SOURCE TECHNICAL AND ENVIRONMENTAL COMPLIANCE ASSISTANCE PROGRAM.

(a) Plan Revisions.—Consistent with sections 110 and 112, each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator as part of the State implementation plan for such State or as a revision to such State implementation plan under this section, plans for establishing a small source technical and environmental compliance assistance program. Such submission shall be made within 24 months after the date of the enactment of the Clean Air Act Amendments of 1990. The Administrator shall approve such program if it includes each of the following:

(1) Adequate mechanisms for developing, collecting, evaluating, and coordinating information concerning compliance methods and technologies for small sources.

(2) Adequate mechanisms for advising small sources on pollution prevention, including providing information concerning alternative technologies, process changes, products, and methods of operation that help reduce air pollution.

(3) A designated State office within the relevant State agency to serve as ombudsman for small sources in connection with the implementation of this Act.

(4) A program for permits that meets the requirements of subsection (c).

(5) Adequate mechanisms to assure that small sources receive notice of their rights under this Act in such manner and form as to assure reasonably adequate time for such sources to evaluate compliance methods and any relevant or applicable proposed or final regulation or standard issued under this Act.

(b) Program.—The Administrator shall establish within 9 months after the date of the date of the enactment of the Clean Air Act Amendments of 1990 a small source technical assistance program. Such program shall—

(1) assist the States in the development of the program required under subsection (a) and section 112(o) (relating to technical assistance for small sources);

(2) issue technical guidance for the use of the States in the implementation of these programs that includes alternative control technologies and pollution prevention methods applicable to small sources; and

(3) provide for implementation of the program required under subsection (c) in any State that fails to submit an applicable program under that paragraph.

(c) State Permit Program.—The State shall establish a permit program for small sources located within a nonattainment area, ozone transport area, or subject to a standard under section 112 consistent with the other provisions of this title. Such program shall provide that—

(1) a small source shall have the option of obtaining an individual permit under this subsection as a substitute for any general permit issued under this title;

(2) such individual permit shall be developed after consultation with the small source or with duly authorized representatives of the small sources;

(3) individual permits issued under this subsection to small sources shall require compliance with applicable standards, regulations, or requirements under this Act, including emission limitations, pollution control measures, and recordkeeping and reporting requirements under this Act, except that methods of and time for compliance with any such standard or requirement may be modified for a small source in such permit based on the technical and financial capability of the small source or group of sources and the availability of less burdensome alternatives, and, in particular, pollution prevention measures; any such modifications shall achieve equivalent emission reductions consistent with the public health, welfare, and environmental protection goals and deadlines of this Act;

(4) any individual permit issued to a small source under this subsection shall be issued in accordance with the procedures of this title, and shall be subject to review by the Administrator, as provided in this title;

(5) the State (or the Administrator) may reduce any fee required under this Act to take into account the financial resources of a small source; and

(6) requirements for continuous emission monitoring will not be imposed on a small source (or sources) unless the State (or the Administrator) has determined that such requirements are necessary and appropriate.

(d) Eligibility.—For purposes of this section, eligibility for participation in the program under this subsection shall be limited to small sources (as defined in this Act) which are small businesses (as defined in the Small Business Act). The Administrator, in consultation with the Administrator of the Small Business Administration and after providing notice and opportunity for public comment, may exclude from coverage any category or subcategory of sources that the Small Business Administrator determines to have sufficient technical and financial capabilities to meet the requirements of this Act without the application of this subsection.

(e) Monitoring.—The Administrator shall direct the Agency's Office of Small and Disadvantaged Business Utilization through the Small Business Ombudsman (hereinafter in this section referred to as the “Ombudsman”) to monitor the Small Business Environmental Compliance Assistance Program under this subsection. In carrying out such monitoring activities, the Ombudsman shall—

(1) render advisory opinions on the overall effectiveness of the Small Source Technical and Environmental Compliance Assistance Program, difficulties encountered, and degree and severity of enforcement;

(2) make periodic reports to the Congress on the compliance of the Small Source Technical and Environmental Compliance Assistance Program with the requirements of the Paperwork Reduction Act, the Regulatory Flexibility Act, and the Equal Access to Justice Act;

(3) review information to be issued by the Small Source Technical and Environmental Compliance Assistance Program for small business stationary sources to ensure that the information is understandable by the layperson; and

(4) have the Small Source Technical and Environmental Compliance Assistance Program serve as the secretariat for the development and dissemination of such reports and advisory opinions.

(f) Compliance Advisory Panel.—(1) There shall be created a Compliance Advisory Panel (hereinafter referred to as the “Panel”) on the State level of not less than 7 small business owners. This Panel shall—

(A) render advisory opinions concerning the effectiveness of the Small Source Technical and Compliance Assistance Program, difficulties encountered, and degree and severity of enforcement;

(B) make periodic reports to the Administrator concerning the compliance of the State Small Source Technical and Environmental Compliance Assistance Program with the requirements of the Paperwork Reduction Act, the Regulatory Flexibility Act, and the Equal Access to Justice Act;

(C) review information for small stationary sources to assure such information is understandable by the layperson; and

(D) have the Small Source Technical and Environmental Compliance Assistance Program serve as the secretariat for the development and dissemination of such reports and advisory opinions.

(2) The Panel shall consist of—

(A) 2 members selected by the Governor;

(B) 2 members selected by the State legislature (1 member each by the majority and minority leadership of the lower house, or in the case of a unicameral State legislature, 2 members each shall be selected by the majority leadership and the minority leadership, respectively, of such legislature, and subparagraph (C) shall not apply);

(C) 2 members selected by the State legislature (1 member each by the majority and minority leadership of the upper house, or the equivalent State entity); and

(D) 1 member selected by the head of the department or agency of the State responsible for air pollution permit programs.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

SEC. 501. FINDINGS AND PURPOSES.

(a) Findings.—The Congress finds that—

(1) the presence of acidic compounds and their precursors in the atmosphere and in deposition from the atmosphere represents a threat to natural resources, ecosystems, materials, visibility, and public health;

(2) the principal sources of the acidic compounds and their precursors in the atmosphere are emissions of sulfur and nitrogen oxides from the combustion of fossil fuels and other industrial processes;

(3) the problem of acid deposition is of national and international significance and cannot be addressed adequately without effective State-Federal and international cooperation;

(4) strategies and technologies for the control of precursors to acid deposition exist now that are economically feasible, and improved methods are expected to become increasingly available over the next decade;

(5) current and future generations of Americans will be adversely affected by delaying measures to remedy the problem;

(6) reduction of total atmospheric loading of sulfur dioxide and nitrogen oxides will enhance protection of the public health and welfare and the environment;

(7) control measures to reduce acid deposition precursor emissions from steam-electric generating units should be initiated without delay.

(b) Purposes.—The purpose of this title is to reduce the adverse effects of acid deposition through reductions in annual emissions of sulfur dioxide of approximately 10,000,000 tons from 1980 emission levels, and reductions in annual emissions of oxides of nitrogen of approximately 2,500,000 tons relative to their levels in the year 2000, in the 48 contiguous States and the District of Columbia, while providing for the continued use of all fossil fuels for electric generation and ensuring electric reliability. It is also the purpose of this title to encourage energy conservation and the use of renewable resources and to encourage pollution prevention as a long range strategy, consistent with the provisions of this title, for reducing air pollution and other adverse impacts of energy production and use and, to the greatest extent possible, to prevent or mitigate potential losses or shifts in employment and other socioeconomic impacts caused by such reductions and prevention.

(c) Coverage.—This title shall apply only in the 48 contiguous States and the District of Columbia.

SEC. 502. DEFINITIONS; DATA.

(a) Definitions.—As used in this title—

(1) Affected source.—The term “affected source” means a source that includes one or more affected units.

(2) Unit.—The term “unit” means a fossil fuel-fired steam production device such as a boiler or furnace used to combust fuel to produce steam.

(3) Affected unit.—The term “affected unit” means a unit for which annual allowances are allocated under this title.

(4) Electric utility steam generating unit.—The term “electric utility steam generating unit” has the meaning provided by section 112(a)(4), except that such term does not include any qualifying small power production facility or qualifying cogeneration facility (within the meaning of section 3(17)(C) or 3(18)(B) of the Federal Power Act) (A) that sells power pursuant to a long-term contract to supply electricity executed on or before December 31, 1989, or (B) with respect to which a State regulatory authority issued an order on or before December 31, 1989, directing the purchasing utility to execute such a contract with such a facility.

(5) Existing electric utility steam generating unit.—The term “existing electric utility steam generating unit” means an electric utility steam generating unit that commenced commercial operation before the date of the enactment of the Clean Air Act Amendments of 1990. Any such unit which is modified, reconstructed or repowered after such date shall continue to be an existing electric utility steam generating unit for purposes of this title.

(6) New electric utility steam generating unit.—The term “new electric utility steam generating unit” means any electric utility steam generating unit which is not an existing electric utility steam generating unit.

(7) Allowance.—The term “allowance” means an authorization, as described in section 503(f), issued by the Administrator under this title, to emit, during any single calendar year, a ton of sulfur dioxide (or nitrogen oxides in the case of nitrogen oxide allowances issued under section 509).

(8) Baseline.—Except as otherwise provided in this title, the term “baseline” means the annual quantity of fossil fuel consumed, measured in millions of British thermal units (“mmBtu”), calculated as follows:

(A) For each electric utility steam generating unit in commercial operation before January 1, 1985, the baseline shall be the average annual quantity of fuel (in mmBtu) consumed during calendar years 1985, 1986, and 1987, as recorded pursuant to Department of Energy Form 767. For any unit for which these forms were not filed, the baseline shall be the annual fuel consumption level specified for that unit in the 1985 National Acid Precipitation Assessment Program (NAPAP) Emissions Inventory, Version 2 (including where applicable, the National Utility Reference File (NURF)). The Administrator shall exclude periods during which a unit is shut down for a continuous period of 4 months or longer, and make appropriate adjustments under this paragraph. Upon petition of the owner or operator of any unit, the Administrator may make appropriate baseline adjustments for accidents that caused prolonged outages.

(B) For each existing electric utility steam generating unit that commenced commercial operation on or after January 1, 1985, the baseline shall be the unit's average annual fuel consumption (in mmBtu) at a 65 percent capacity factor, except that upon petition of the owner or operator, the Administrator may establish as the baseline for any such unit—

(i) the annual average fuel consumption (in mmBtu) for the first 3 full consecutive calendar years beginning after the unit commenced commercial operation, or

(ii) if it is not feasible to use such 3-calendar year period, the unit's annual average fuel consumption (in mmBtu) for a representative calendar year after 1985, as calculated pursuant to a method which the Administrator shall, by regulation, prescribe.

(C) For any other unit, the baseline shall be the average annual quantity of fuel consumed (in mmBtu) by that unit, as established by the Administrator by rule.

(9) Compliance plan.—The term “compliance plan” means the compliance plan required under title IV.

(10) Continuous emission monitoring system.—The terms “continuous emission monitoring system” and “CEMS” mean the equipment used to sample, measure, analyze, and provide, on a continuous basis, a permanent record of emissions and flow (expressed in pounds per million British thermal units (lbs./mmBtu), pounds per hour (lbs./hr.)), or such other items as the Administrator may, by rule, prescribe under section 511(a).

(11) First and second phase.—The term “First Phase” means the period after December 31, 1995, and before January 1, 2001, and the term “Second Phase” means the period beginning January 1, 2001.

(12) Permitting authority.—The term “permitting authority” has the meaning given that term in title IV.

(13) Clean coal technology.—The term “clean coal technology” means any technology, including any technology applied at the precombustion, combustion, or postcombustion stage, at a new or existing electric utility steam generating unit which will achieve significant reductions in air emissions of any pollutant or pollutants associated with the utilization of coal in the generation of electricity, process steam, or industrial products, which is not in widespread use as of the date of the enactment of the Clean Air Act Amendments of 1990.

(14) Repowering.—The term “repowering” means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or a derivative of one or more of these technologies, or any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and of achieving significantly greater waste reduction relative to the performance of technology in widespread commercial use as of the date of the enactment of the Clean Air Act Amendments of 1990, as determined by the Administrator, in consultation with the Secretary of Energy.

(15) State.—The term “State” means one of the 48 contiguous States or the District of Columbia.

(16) Actual 1985 emission rate.—For any unit, the term “actual 1985 emission rate” means the lesser of the rate described in subparagraph (A) or (B), expressed in lbs./mmBtu—

(A) The unit's average emission rate for sulfur dioxide or oxides of nitrogen for the calendar year 1985 as reported in the National Acid Precipitation Assessment Program (NAPAP) Emissions Inventory, Version 2 (National Utility Reference File (NURF), if applicable).

(B) The emission rate (if any) applicable to the unit under the applicable implementation plan for the calendar year 1985, based on documentation in existence before January 1, 1990.

In the case of an existing unit that was not in commercial operation in calendar year 1985, the term “actual 1985 emissions rate” means the unit's emissions rate for a representative calendar year after 1985, as determined by the Administrator. The Administrator shall select the representative calendar year to be used for such purposes within 1 year after the enactment of the Clean Air Act Amendments of 1990.

(b) Correction of Data.—The Administrator shall, upon application or on the Administrator's own motion, by December 31, 1991, correct any factual errors in data from which affected Second Phase units' baselines or actual 1985 emission rates have been calculated. Corrected data shall be used for purposes of issuing allowances under this title. The failure of the Administrator to correct any alleged factual error in such reports shall not be subject to judicial review.

SEC. 503. ALLOWANCE PROGRAM.

(a) Allocation of Annual Allowances for Existing Units.—The Administrator shall allocate annual allowances to the owner or operator of the affected units at an affected source in the annual amounts calculated under this title. First Phase allowances may not be allocated or issued for the Second Phase. Nothing in the preceding sentence shall be construed to prohibit the banking of unused First Phase allowances to be carried forward and added to allowances allocated in subsequent years, including years in the Second Phase. Except as provided in section 508(d) and 509, the removal of an existing affected unit or source from commercial operation at any time after the date of the enactment of the Clean Air Act Amendments of 1990 (whether before or after commencement of the First Phase or Second Phase) shall not terminate or otherwise affect the allocation of allowances for the First Phase or for the Second Phase to which the unit is entitled. Allowances shall be allocated and issued by the Administrator without cost to the recipient.

(b) EPA Allowance System Regulations.—

(1) In general.—(A) Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate such regulations under this section as may be necessary to implement the allowance system established under this section.

(B) The regulations under this section shall ensure that (i) allowances are issued and allocated in a timely manner, (ii) the allowance system functions effectively, efficiently, and competitively and without discrimination, (iii) allowances are reasonably transferable temporarily or permanently by purchase, lease, or otherwise, and (iv) allowances are not used to impede access to, or competition for, electric energy in any market.

(C) The regulations under this section shall otherwise protect the integrity and value of such allowances and of the allowance system from fraud or misuse.

(D) The regulations under this section shall be consistent with requirements for electric utility reliability, including central dispatch and the need to meet or cope with emergencies of any kind, and shall govern the issuance, transfer, holding, use, and banking of all allowances.

(E) The regulations under this section shall provide that the allowances issued under this title may be transferred among the owners or operators of affected sources and other persons, including a multistate electric utility and new independent power producer units. Such regulations shall permit the transfer of the right to receive allowances prior to the issuance of such allowances. Such regulations shall permit transfers, including transfers by auction or through the mechanism of a reserve, only within each of the 2 major geographic regions of the country as defined by the Administrator in such regulations, except as provided in subsection (e) in the case of new units, and except that an owner or operator, as of the date of enactment of the Clean Air Act Amendments of 1990, of 2 or more affected units may transfer allowances among such units, irrespective of regional boundaries.

(2) Review and revision.—The Administrator shall review the allowance program established under this section, and the regulations implementing such program, at intervals of at least every 4 years after promulgation of such regulations and shall make the results of such review public. Based on such review, the Administrator shall amend such regulations to the extent necessary, consistent with the purposes and provisions of this title.

(3) Consultation.—In the development and promulgation of regulations under this section and in the administration of the allowance program established under this section, the Administrator shall consult with, and utilize the expertise of, the Secretary of Energy and the Federal Energy Regulatory Commission. In the case of State regulated electric utilities, the Administrator shall also consult with, and obtain the advice of, the applicable electric utility ratemaking authority of the State. The Administrator shall also consult with, and obtain the advice of, representatives of regulated and nonregulated electric utilities. The Administrator shall also consult with the interested public. The Administrator shall particularly consult with the Commission and such ratemaking authorities concerning issues of operation and ownership of affected units under applicable laws, tariffs, regulations, and contractual arrangements to ensure that the allowances are properly issued and recorded and that the allowance system functions as provided by paragraph (1).

(4) Multiple ownership.—(A) The Administrator shall include in the regulations under this section requirements under this paragraph regarding the issuance of allowances for an affected unit where the affected unit is owned by more than one person. Such regulations shall require that, unless the owners of the unit otherwise provide by contract, allowances for the affected unit shall be issued to each person owning a share in the unit in proportion to the ownership shares.

(B) The regulations under this paragraph shall also require that, unless the owners of the unit otherwise provide by contract, whenever any owner is required by contract to contribute to the costs of control of emissions at the unit and the level of emissions control at such unit makes allowances issued to such unit available for transfer, the owners required to contribute to such costs of control shall share such transferable allowances in proportion to each owner's contribution to such costs.

(C) The regulations under this paragraph shall also provide, for the purpose of this section, that—

(i) the term “owner” shall include the holder of a leasehold interest in an affected unit or any part thereof and shall not include a passive lessor, or a person who has an equitable interest through such passive lessor, whose rental payments are not based directly or indirectly upon the revenues or income from the affected unit; and

(ii) where a utility purchases power from an affected unit under a life-of-the-unit, firm power contractual arrangement, such utility shall be considered an owner in proportion to its contractual share.

For the purposes of clause (ii) of this subparagraph, the term “life-of-the-unit, firm power contractual arrangement” means a contractual arrangement under which a utility receives a specified amount or percentage of capacity and associated energy

generated by a specified generating unit (or units) and pays its proportional amount of such unit's total costs for the life of the unit.

(c) Interpollutant Trading.—The regulations under subsection (b) shall provide, subject to any applicable restrictions pursuant to section 520, for trading and banking of allowances for sulfur dioxide and oxides of nitrogen, including the establishment of a baseline under section 509 for emissions of oxides of nitrogen. Such regulations shall provide that, for trading purposes, 1.5 pounds of oxides of nitrogen shall be equivalent to 1.0 pound of sulfur dioxide. Interpollutant trades of allowances for use in areas failing to meet the applicable national primary ambient air quality standard for ozone, nitrogen dioxide, sulfur dioxide, or PM-10 shall be subject to approval by the Administrator in accordance with such regulations.

(d) Allowance Tracking System.—(1) The Administrator shall establish a system for issuing, recording, and tracking allowances under this title, and shall specify by regulation, promulgated as provided in subsection (b), the procedures and requirements for that system.

(2) All allowance allocations and transfers shall, upon recordation by the Administrator, be deemed a part of each unit's permit for purposes of section 507.

(3) The Administrator shall take such steps as may be necessary to ensure that allowance transfers are recorded within 14 working days after receipt of a properly certified notice of such transfer and that persons receiving or transferring allowances file accurate annual reports regarding such transactions and that persons holding allowances during any year file accurate annual reports regarding the number of such allowances held. Transfers of allowances shall not be effective until written certification of the transfer on a proper form (signed by a responsible official of each party to the transfer) is received and recorded by the Administrator. All such transfers shall be consistent with the purposes and requirements of this title and shall not result in emissions of sulfur dioxide (or, if applicable, nitrogen oxides) in any year in excess of the total number of allowances authorizing such emissions in that year, including allowances carried forward from previous years.

(4) In order to insure electric reliability, such regulations shall not prohibit or affect temporary increases and decreases in emissions within utility systems or power pools that result from their operations, including emergencies and central dispatch, and such temporary emissions increases and decreases shall not require transfer of allowances among units nor shall it require recordation. Notwithstanding the preceding sentence, the total tonnage of emissions in any calendar year (calculated at the end thereof) from each unit involved shall not exceed the allowances allocated to the unit for the calendar year concerned and issued to the owner or operator of the unit for that year, plus or minus allowances transferred to or from the unit for such calendar year or carried forward to that year from prior years.

(5) Regulations under this section shall provide, consistent with the purposes of this title, for the identification of unused allowances and for such unused allowances to be carried forward and added to allowances allocated in subsequent years.

(6) No allowance allocated to any unit for a subsequent year may be carried backward and added to allowances in an earlier year.

(7) The provisions of section 1001 of title 18 of the United States Code shall apply to reports under this section and to the recordation of allowance transactions and holdings under this section.

(e) New Electric Utility Steam Generating Units.—In the Second Phase, the owner or operator of each new electric utility steam generating unit must hold allowances equal to the annual tonnage of sulfur dioxide emitted by the unit. Notwithstanding the geographic limitations referred to in subsection (b), such new units may obtain allowances from any person, consistent with the regulations issued under this section.

(f) Nature of Allowances.—An allowance issued under this title is a limited authorization to emit sulfur dioxide or nitrogen oxides in accordance with the provisions of this title. Nothing in this title or in any other provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization by Act of Congress. Consistent with section 512, nothing in this section relating to allowances shall be construed as affecting the application of, or compliance with, any other provision of this Act to an affected unit or source, including the provisions related to applicable National Ambient Air Quality Standards and State implementation plans. Allowances under this title may not be extinguished by the Administrator. Nothing in this section shall be construed as requiring a change of any kind in any State law regulating electric utility rates and charges or affecting any State law regarding such State regulation or as limiting State regulation (including any prudency review) under such a State law. Nothing in this section shall be construed as modifying the Federal Power Act or as affecting the authority of the Federal Energy Regulatory Commission under that Act. Nothing in this title shall be construed to interfere with or impair any program for competitive bidding for power supply in a State in which such program is established. Allowances, once issued to a person by the Administrator, may be received, held, and temporarily or permanently transferred in accordance with this title and the regulations of the Administrator without regard to whether or not a permit is in effect under title IV or section 507 with respect to the unit for which such allowance was originally issued and recorded. Each permit under this title and each permit issued under title IV for any affected unit shall provide that the affected unit may not emit an annual tonnage of sulfur dioxide in excess of the allowances allocated to that unit for the year concerned and issued to the owner or operator of the unit for that year, plus or minus the allowances transferred to or from the unit for that year or carried forward to that year from prior years. Nothing in title IV or section 507 shall be construed as affecting any allowances issued in accordance with this title or as authorizing a permitting authority to establish, in issuing a permit, conditions affecting allowances issued under this title.

(g) Prohibition.—It shall be unlawful for any person to hold or transfer any allowance issued under this title, except in accordance with regulations issued by the Administrator.

(h) Issuance.—The Administrator shall issue First Phase allowances under this title promptly following the promulgation of regulations under this section. The Administrator shall issue Second Phase allowances under this title promptly following publication of the list and the making of any required adjustments under subsection (i), but no later than 6 months after publication of the final list under subsection (i).

(i) 8,900,000 Tons of Second Phase Allowances.—

(1) List of allowances to be issued.—The Administrator shall publish, not later than December 31, 1991, but before issuing Second Phase allowances, a proposed list of all Second Phase allowances to be allocated and issued under this section based on this title (other than section 509). After notice and opportunity for public comment on such proposed list, but no later than December 31, 1995, the Administrator shall publish the final list of all Second Phase allowances.

(2) 3,980,000 tons for clean units and small units.—If the Administrator determines that the total of Second Phase allowances to be issued under this title (other than under section 509) to units with an actual 1985 emissions rate below 1.2 lbs/mmBtu and to units with a nameplate capacity below 75 Mwe would be more or less than 3,980,000 tons per year, the Administrator shall adjust the number of allowances to be issued under this title for the Second Phase to those units to ensure that such tonnage will equal 3,980,000 tons per year. The Administrator shall reallocate any reduction or increase in allowances to each such affected unit on the basis of the ratio which the allowances which (but for the preceding sentence) would be issued to such unit bears to the total allowances which (but for the preceding sentence) would be issued to all of such units.

(3) 4,920,000 tons for large units emitting at 1.2 or above.—If the Administrator determines that the total tonnage of Second Phase allowances to be issued under this title (other than section 509) to units with an actual 1985 emissions rate of 1.2 lbs/mmBtu or greater and a nameplate capacity of 75 Mwe or greater would be more or less than 4,920,000 tons per year, the Administrator shall adjust the allowances to be issued under this title for the Second Phase to those units to ensure that such allowances will equal 4,920,000 tons per year. The Administrator shall reallocate any reduction or increase in allowances to

each such affected unit on the basis of the ratio which the tonnage of allowances which (but for the preceding sentence) would be issued to such unit bears to the total allowances which (but for the preceding sentence) would be issued to all of such units.

(4) Total limit.—In no event shall the Administrator issue Second Phase allowances in excess of 8,900,000 tons per year under this title (other than under section 509).

(5) Deduction and reserve to compensate for interruptible gas provisions.—In order to compensate for potential emissions of sulfur dioxide from interruptible gas units as described in section 505(h), in calculating under this subsection the allowances to be issued under this title (other than section 509), the Administrator shall deduct from the total allowances which would otherwise be issued to all affected units referred to in paragraph (2) for the Second Phase allowances equal to 75,000 tons per year. The Administrator shall credit such allowances to a Reserve for Gas Supply Interruptions. Every 3 years after establishing such reserve the Administrator shall allocate the unused allowances to all affected units referred to in paragraph (2) on a pro rata basis. For purposes of this paragraph, for any such unit, the term “pro rata basis” means the ratio which the allowances allocated under this title to that unit bears to the allowances allocated under this title to all such units.

(j) Energy Conservation and Renewable Energy.—

(1) Definitions.—As used in this subsection:

(A) The term “qualified energy conservation measure” means a cost effective measure, as identified by the Administrator in consultation with the Secretary of Energy, that increases the efficiency of the use of electricity provided by an electric utility to its customers.

(B) The term “qualified renewable energy” means energy derived from biomass, solar, geothermal, or wind as identified by the Administrator in consultation with the Secretary of Energy.

(C) The term “electric utility” means any person, State agency, or Federal agency, which sells electric energy.

(2) Allowances for emissions avoided through energy conservation and renewable energy.—

(A) In general.—The regulations under paragraph (4) of this subsection shall provide that for each ton of sulfur dioxide emissions avoided by an electric utility, during the applicable period, through the use of qualified energy conservation measures or qualified renewable energy, the Administrator shall allocate and issue a single allowance to such electric utility, on a first-come-first-served basis from the Conservation and Renewable Energy Reserve established under subsection (k), to the extent allowances are available for issuance from such Reserve.

(B) Requirements for issuance.—The Administrator shall issue allowances to an electric utility under this subsection only if all of the following requirements are met:

(i) Such electric utility is paying for the qualified energy conservation measures or qualified renewable energy directly or through purchase from another person.

(ii) The emissions of sulfur dioxide avoided through the use of qualified energy conservation measures or qualified renewable energy are quantified in accordance with regulations promulgated by the Administrator under this subsection.

(iii)(I) Such electric utility has adopted and is implementing a least cost energy conservation and electric power plan which evaluates a range of resources, including new power supplies, energy conservation, and renewable energy resources, in order to meet expected future demand at the lowest system cost.

(II) The qualified energy conservation measures or qualified renewable energy, or both, are consistent with that plan.

(III) Electric utilities subject to the jurisdiction of a State regulatory authority must have such plan approved by such authority. For electric utilities not subject to the jurisdiction of a State regulatory authority such plan shall be approved by the entity with rate-making authority for such utility.

(iv) In the case of a State regulated electric utility, the Secretary of Energy certifies that the State regulatory authority with jurisdiction over the electric rates of such electric utility has established rates and charges which ensure that the net income of such electric utility after implementation of specific cost effective energy conservation measures is at least as high as such net income would have been if the energy conservation measures had not been implemented. Upon the date of any such certification by the Secretary of Energy, all allowances which, but for this paragraph, would have been issued under subparagraph (A) before such date, shall be issued to the electric utility.

(v) Such utility or any subsidiary of the utility's holding company owns or operates at least one affected unit.

(C) Use of allowances.—The allowances issued under this subsection may be used to authorize emissions only at units owned or operated by an electric utility which is implementing a least cost energy plan meeting the requirements of subparagraph (B)(iii)(I) and approved as provided in subparagraph (B)(iii)(III).

(D) Period of applicability.—Allowances under this subsection shall be issued only with respect to kilowatt hours of electric energy saved by qualified energy conservation measures or generated by qualified renewable energy after January 1, 1992 and before the earlier of (i) December 31, 2000, or (ii) the date on which any electric utility steam generating unit owned or operated by the electric utility to which the allowances are issued becomes subject to this title (including those sources that elect to become affected by this title, pursuant to section 509).

(E) Determination of avoided emissions.—

(i) Application.—In order to receive allowances under this subsection, an electric utility shall make an application which—

(I) designates the qualified energy conservation measures implemented and the qualified renewable energy sources used for purposes of avoiding emissions,

(II) calculates, in accordance with subparagraphs (F) and (G), the number of tons of emissions avoided by reason of the implementation of such measures or the use of such renewable energy sources; and

(III) demonstrates that the requirements of subparagraph (B) have been met.

Such application for allowances by a State-regulated electric utility shall require approval by the State regulatory authority with jurisdiction over such electric utility. The authority shall review the application for accuracy and compliance with this subsection and the rules under this subsection. Electric utilities whose retail rates are not subject to the jurisdiction of a State regulatory authority shall apply directly to the Administrator for such approval.

(F) Avoided emissions from qualified energy conservation measures.—For the purposes of this subsection, the emission tonnage deemed avoided by reason of the implementation of qualified energy conservation measures for any calendar year shall be a tonnage equal to the product of multiplying—

(i) the kilowatt hours that would otherwise have been supplied by the utility during such year in the absence of such qualified energy conservation measures, by

(ii) 0.004,

and dividing by 2,000.

(G) Avoided emissions from the use of qualified renewable energy.—The emissions tonnage deemed avoided by reason of the use of qualified renewable energy by an electric utility for any calendar year shall be a tonnage equal to the product of multiplying—

(i) the actual kilowatt hours generated by, or purchased from, qualified renewable energy, by

(ii) 0.004,

and dividing by 2,000.

(H) Prohibitions.—(i) No allowances shall be issued under this paragraph for the implementation of programs that are exclusively informational or educational in nature.

(ii) No allowances shall be issued for energy conservation measures or renewable energy that were operational before January 1, 1992.

(3) Savings provision.—Nothing in this subsection precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

(4) Regulations.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990 and in conjunction with the regulations required to be promulgated under subsections (b) and (c), the Administrator shall, in consultation with the Secretary of Energy, promulgate regulations under this subsection. Such regulations shall list energy conservation measures and renewable energy sources which may be treated as qualified energy conservation measures and qualified renewable energy for purposes of this subsection. Allowances shall only be issued if all requirements of this subsection and the rules promulgated to implement this subsection are complied with. The Administrator shall review the determinations of each State regulatory authority under this subsection to encourage consistency from electric utility to electric utility and from State to State in accordance with the Administrator's rules. The Administrator shall publish the findings of this review no less than annually.

(k) Conservation and Renewable Energy Reserve.—The Administrator shall establish a Conservation and Renewable Energy Reserve under this subsection. The reserve shall contain total allowances equal to 400,000 tons which shall be available for issuance following promulgation by the Administrator of regulations under this section, 200,000 tons of which may be used to authorize emissions after January 1, 2001 and the remaining 200,000 tons of which may only be used to authorize emissions after January 1, 2006. The Administrator shall issue allowances which can be used to authorize emissions after January 1, 2001 before issuing allowances which can only be used to authorize emissions after January 1, 2006. In order to establish 300,000 tons of such reserve, the Administrator shall reduce—

(A) the tonnage specified in subsection (i)(2) by 10,000 tons per year for the first 10 years of the Second Phase, and

(B) the tonnage specified in subsection (i)(3) by 20,000 tons per year for the first 10 years of the Second Phase.

The remaining 100,000 tons of such 400,000 ton total in the reserve shall be credited to the reserve, without regard to any limitations set forth in subsection (i). If allowances remain in the reserve after January 2, 2011, the Administrator shall allocate and issue 75 percent of such allowances to Second Phase affected units on a pro rata basis. For purposes of this paragraph, for any Second Phase unit, the term “pro rata basis” refers to the ratio which the reductions made in such unit's allowances in order to establish the reserve under this paragraph bears to the total of such reductions for all Second Phase units.

(l) Contingency Guarantee for Certain New Independent Power Production Facilities.—

(1) Definitions.—For purposes of this subsection—

(A) The term “independent power producer” means any person who owns or operates, in whole or in part, one or more new independent power production facilities.

(B) The term “new independent power production facility” means a facility that—

(i) is used for the generation of electric energy, 80 percent or more of which is sold at wholesale;

(ii) is project-financed (as such term is defined by the Secretary of Energy within 3 months of the date of the enactment of the Clean Air Act Amendments of 1990);

(iii) does not generate electric energy sold to any affiliate (as defined in section 2(a)(11) of the Public Utility Holding Company Act of 1935) of the facility's owner or operator; and

(iv) is a new unit required to hold allowances under subsection (e).

(C) The term "required allowances" means the allowances required to operate such unit for so much of the unit's useful life as occurs after commencement of the Second Phase.

(2) Entitlement to written guarantee.—Any independent power producer that submits an application to the Administrator establishing that such independent power producer—

(A) proposes to construct a new independent power production facility for which allowances are required under this title;

(B) will apply for financing to construct such facility after January 1, 1990, and before the date of the early auction under section 519(a);

(C) has submitted to each owner or operator of an affected unit listed in table A (in section 504) a written offer to purchase the required allowances for \$750 per ton; and

(D) has not received (within 180 days after submitting offers to purchase under subparagraph (C)) an acceptance of the offer to purchase the required allowances

shall, within 30 days after submission of such application, be entitled to receive the Administrator's written guarantee (subject to the eligibility requirements set forth in paragraph (3)) that such required allowances will be made available for purchase from the reserve established under section 519(c) and at a guaranteed price. The guaranteed price at which such allowances shall be made available for purchase shall be \$1,500 per ton, adjusted by the percentage, if any, by which the Consumer Price Index (as determined under section 402(b)(3)(B)(v)) for the year in which the allowance is purchased exceeds the Consumer Price Index for the calendar year in which the auction takes place.

(3) Eligibility requirements.—The guarantee issued by the Administrator under paragraph (2) shall be subject to a demonstration by the independent power producer, satisfactory to the Administrator, that—

(A) the independent power producer has—

(i) submitted a good faith bid in the auction under section 519(a);

(ii) made good faith efforts (after the auction under section 519(a)) to purchase the required allowances from the owners or operators of affected units to which allowances will be allocated, including efforts to purchase at annual auctions under section 519(b), and from industrial sources that have volunteered to become affected units pursuant to section 509; and

(iii) such bids and efforts were unsuccessful in obtaining the required allowances; and

(B) the independent power producer will continue to make good faith efforts to purchase the required allowances from the owners or operators of affected units and from industrial sources.

(4) Issuance of guaranteed allowances from reserve under section 519(c).—From the reserve established under section 519(c)(2), upon payment of the guaranteed price, the Administrator shall issue to any person exercising the right to purchase allowances pursuant to a guarantee under this subsection the allowances covered by such guarantee. Persons to which guarantees under this subsection have been issued shall have the opportunity to purchase allowances pursuant to such guarantee from such reserve before the allowances in such reserve are offered for sale to any other person.

(m) Incentive Allowances for Early Reductions.—(1) The Administrator shall promulgate regulations under this subsection within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990. Following promulgation of such

regulations, the Administrator shall allocate and issue allowances during the First Phase to the owner or operator of each unit which is a First Phase affected unit if the owner or operator of the unit establishes to the satisfaction of the Administrator that—

(A) the unit has reduced sulfur dioxide emissions in any year after the such date of enactment, but before the First Phase (hereinafter in this subsection referred to as the “prior year”),

(B) such emission reductions are not otherwise required under this Act,

(C) such emission reductions are obtained solely through the installation or additional use of a technological system of continuous emission reduction which achieves at least a 70 percent reduction from the potential combustion concentration; and

(D) the unit complies with section 511 (relating to monitoring, reporting, and recordkeeping).

(2) Each allowance issued as provided in this subsection shall authorize a single ton of sulfur dioxide emissions for a single year during the First or Second Phase. Except as provided below, the tonnage of allowances issued under this subsection for any unit shall be equal to the amount by which (A) the product of the unit's baseline multiplied by the unit's 1985 actual sulfur dioxide emissions rate (in lbs per mm Btu), divided by 2,000 lbs/ton exceeds (B) the unit's actual tonnage of sulfur dioxide emissions for the prior year concerned. No allowances shall be allocated as provided in this subsection for emission reductions resulting from reduced utilization. Allowances may be allocated under this subsection only for emission reductions achieved after the enactment of the Clean Air Act Amendments of 1990 as the result of the installation or additional use of a technological system of continuous reduction meeting the requirements of subparagraph (C) of paragraph (1).

(n) Alternative Allowance Allocation for Units in Certain Utility Systems With Optional Baseline.—

(1) Optional baseline for units in certain systems.—In the case of a First Phase unit which (as of the date of the enactment of the Clean Air Act Amendments of 1990)—

(A) has an emission rate below 1.0 lbs mmBtu,

(B) has decreased its emissions rate by 60 percent or greater since 1980, and

(C) is part of a utility system which has a weighted average emission rate for all fossil fueled-fired units below 1.0 lbs/mmBtu,

at the option of the owner or operator of such unit, the unit's baseline may be calculated (i) as provided under section 502(a)(8), or (ii) by utilizing the unit's average annual fuel consumption at a 60 percent capacity factor. Such election shall be made no later than March 1, 1991.

(2) Allowance allocation.—Whenever a unit referred to in paragraph (1) elects to calculate its baseline as provided in clause (ii) of paragraph (1), the Administrator shall allocate allowances to the unit for the First and Second Phase in an amount equal to the baseline selected multiplied by the lower of the average emission rate for such unit in 1989, or 1.0 lbs/mmBtu. Such allowance allocation shall be in lieu of any allocation of allowances under sections 504 and 505. For purposes of applying subsection (i), the units referred to in this subsection shall be treated as units with an actual 1985 emission rate of 1.20 lbs/mmBtu or greater, regardless of the option elected.

SEC. 504. FIRST PHASE SULFUR DIOXIDE EMISSION REDUCTION PROGRAM.

(a) First Phase Affected Units.—(1) For the First Phase (beginning December 31, 1995) each unit listed in table A is a First Phase affected unit under this section. Each source that includes one or more of such affected units is an affected source under this section.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

(2) For the First Phase, each existing electric utility steam generating unit with nameplate capacity of 100 MWe or greater, not included in Table A, that emits sulfur dioxide at an annual rate of 2.50 lbs/mmBtu or greater, for any calendar year after the date of the date of enactment of the Clean Air Act Amendments of 1990 and prior to the Second Phase is also a First Phase affected unit under this section. The Administrator shall promulgate regulations to prevent abuse of this paragraph, which shall provide that no unit shall be treated as a First Phase affected unit to which allowances are allocated under section 503 where the Administrator finds that the owner or operator of the unit has increased the unit's emissions rate for any calendar year after such date of enactment for the purpose of becoming a First Phase affected unit under this section eligible to receive such allowances.

(3) After the commencement of the First Phase, no First Phase affected unit referred to in paragraph (1) or (2) shall emit sulfur dioxide in any calendar year in a tonnage amount which exceeds the annual First Phase allowances allocated for that unit and issued to the owner or operator of the unit, plus or minus the allowances transferred to or from the unit, or carried forward from prior years.

(b) First Phase Emission Tonnages.—For each affected unit listed in Table A, for the First Phase, the Administrator shall allocate to the unit and issue to the owner or operator of the unit the annual tonnage of sulfur dioxide allowances specified in Table A, reduced by 6 percent. For each affected unit described in subsection (a)(2), for the First Phase, the Administrator shall allocate to the unit and issue to the owner or operator of the unit annual tonnage of sulfur dioxide allowances equal to the product of such unit's baseline multiplied by an emission rate of 2.35 lbs/mmBtu, divided by 2,000 lbs/ton. The allowances calculated under this section shall apply only during the First Phase. Nothing in this subsection shall be construed to treat any unit which does not emit sulfur dioxide at a rate in excess of 2.50 lbs/mm Btu as a First Phase affected unit.

(c) Authority To Substitute Units.—The owner or operator of an affected unit under subsection (a) may submit a proposal to substitute for any unit which is an affected unit under this section any other unit or units under the control of the same owner or operator. In order to make such substitution, the owner or operator shall submit an alternative proposal to the Administrator for approval in conjunction with submission of a permit application and compliance plan under section 507(c) (1). Any proposal must include—

(1) designation of the substitute affected units to which the tonnage amounts under subsection (a) shall apply, in addition to, or in lieu of, the original affected units designated under that subsection;

(2) specification of the baseline, the actual 1985 sulfur dioxide emission rate, and the authorized annual tonnage amount for the original affected unit;

(3) calculation of the calendar year 1985 annual tonnage emitted by the substitute units, based on the baseline for each unit, as defined in section 502, multiplied by the unit's actual 1985 emission rate;

(4) specification of the emission rates, and the annual tonnage amounts that would be applicable to the original and substitute affected units;

(5) documentation, satisfactory to the Administrator, that the reassigned tonnage amounts will, in total, achieve the same or a greater reduction in emissions than the reduction that would have been achieved by the requirements of subsection (a); and

(6) such other information as the Administrator may require.

The Administrator shall review and act on any proposal in accordance with subsection (d).

(d) Administrator's Action on a Proposal.—(1) The Administrator shall review and approve any proposal meeting the requirements of subsection (c). If a proposal does not meet the requirements of subsection (c), the Administrator shall disapprove it. The Administrator shall act on a proposal within 6 months after receipt of a complete submission.

(2) For an approved proposal, each substitute unit and source shall be deemed affected under this title and the Administrator shall act on the submission in accordance with section 507(c). The Administrator shall allocate allowances to the affected units in accordance with the approved proposal. For a disapproved proposal, the Administrator shall issue allowances in accordance with subsection (a). The Administrator's action on any proposal submitted under subsection (c) shall not require a hearing or opportunity for public comment, and shall not be subject to judicial review.

(e) Compliance Extension for Certain Sources Using Certain Technological Means of Emissions Reduction.—No allowances shall be issued or required for calendar year 1996 for any affected unit which uses a technological means of continuous emission reduction (that commences operation after the enactment of the Clean Air Act Amendments of 1990 and achieves at least a 70 percent reduction from the potential combustion concentration) to control sulfur dioxide emissions for purposes of compliance with the requirements of this title during the First Phase. For any such unit, the allowances allocated to the unit for the last 4 years of the First Phase shall be reduced, under rules promulgated by the Administrator, by a total tonnage amount over such 4-year period equal to the amount by which the actual emissions of sulfur dioxide from the unit during the calendar year 1996 exceed the allowances which would (but for this subsection) be allocated to that unit for calendar year 1996. This subsection shall not apply to any unit for which allowances are allocated under subsection (m) (relating to incentive allowances for early reductions).

(f) Two for One Allowance Program.—

(1) Reserve: total tonnage.—The Administrator shall establish a reserve of First Phase allowances to be allocated based on this subsection. The total tonnage of allowances in the reserve shall be equal to 6 percent of the total allowances specified (prior to the 6 percent reduction under section 504(b)) in Table A for the First Phase (other than the allowances specified in such table for the units referred to in section 518, relating to DOE units and any units which are not treated as First Phase affected units by reason of the last sentence of subsection (b) multiplied by 5.

(2) Additional allowances for certain units.—In addition to allowances allocated to units described in this paragraph under other provisions of this section, the Administrator shall allocate First Phase allowances under this paragraph to each First Phase affected unit which—

(A) uses a technological means of continuous emission reduction (achieving at least a 70 percent reduction from the potential combustion concentration) to control sulfur emissions for purposes of compliance with the requirements of this title during the First Phase, which technological means commences operation after the date of the enactment of the Clean Air Act Amendments of 1990; and

(B) emits sulfur dioxide during the First Phase at an annual rate of 1.20 lbs/mmBtu or less.

(3) Additional allowance allocations.—The tonnage of additional allowances allocated under paragraph (2) to each unit referred to in paragraph (2) shall be equal (to the extent adequate allowances are available in the reserve referred to in paragraph (1)) to the amount by which (A) the product of 1.2 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000, exceeds (B) the projected actual annual tonnage emitted by the unit during the First Phase, as determined by the Administrator under regulations promulgated by the Administrator. Such regulations shall insure that such allowances are allocated equitably among the units referred to in paragraph (2) and that the projected emission reductions are achieved by the units to which

such allowances are issued. If allowances remain in the reserve at the end of the First Phase, such remaining allowances shall be allocated and issued to all First Phase affected units on a pro rata basis. For purposes of the preceding sentence, for any First Phase unit, the term "pro rata basis" refers to the ratio which the First Phase allowances allocated to that unit under this title (determined without regard to this subsection) bears to the total of all First Phase allowances allocated to all First Phase units under this title (determined without regard to this subsection). If allowances remain in the reserve at the end of the First Phase such allowances shall be allocated and issued pro rata to the affected units referred to in paragraph (2).

SEC. 505. SECOND PHASE SULFUR DIOXIDE EMISSIONS REDUCTION PROGRAM.

(a) Second Phase Affected Units.—(1) During the Second Phase each unit for which an annual tonnage of Second Phase allowances is allocated as provided in this section shall be a Second Phase affected unit under this section. Each source that includes one or more Second Phase affected units under this section shall be an affected source for the Second Phase.

(2) During the Second Phase, no Second Phase affected unit shall emit sulfur dioxide in an annual tonnage amount which exceeds the Second Phase allowances allocated for that unit and issued to the owner or operator of the unit under section 503, plus or minus the allowances transferred to or from the unit, or carried forward from prior years.

(b) Electric Utility Steam Generating Units 75 MWe or Above Emitting 1.20 lbs MmBtu or Above.—For each year during the Second Phase, the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with a nameplate capacity of 75 MWe or greater and an actual 1985 emissions rate of 1.20 lbs/mmBtu or greater (as certified by the owner or operator thereof) in an amount equal to the product of the unit's baseline, multiplied by an emissions rate equal to 1.20 lbs/mmBtu, divided by 2,000 lbs/ton.

(c) Electric Utility Steam Generating Units Below 75 MWe Emitting 1.20 lbs MmBtu or Above.—

(1) In general.—For each year during the Second Phase, the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with a nameplate capacity below 75 MWe and an actual 1985 emissions rate of 1.20 lbs/MMBtu or greater in accordance with the same rules as are applicable under subsection (b), except as otherwise provided in this subsection.

(2) Election for small systems.—(A) If a unit referred to in paragraph (1) is owned by an electric utility with, as of December 31, 1989, a total steam electric generating capacity of 500 megawatts or less, the owner or operator of the unit may make an election to be covered by this paragraph for the period January 1, 2001 to December 31, 2010 (or for such shorter period as adequate allowances are available in the Small System Account established under this paragraph). Such election shall be made by January 1, 1997, and may be revoked at any time after that date. During the period that any such election is in effect, the unit may emit sulfur dioxide in excess of the allowances allocated to the unit under paragraph (1) if the unit does not exceed an annual emissions rate equal to the unit's 1985 annual average emissions rate. The allowances allocated to the unit pursuant to paragraph (1) for such 10-year period shall be treated as used by the unit and may not be transferred or banked for as long as the election remains in effect.

(B) No later than January 1, 1998, and before January 1 of each successive year through 2009, for each unit for which an election is in effect under this paragraph, the Administrator shall forecast or calculate, as appropriate, the annual tonnage of sulfur dioxide emissions from the unit in excess of the allowances allocated for that unit under paragraph (1). Such excess shall hereinafter in this paragraph be referred to as the "excess tonnage". Allowances equal to the excess tonnage shall be deducted from the Small System Account established under subparagraph (D) of this paragraph. On each of the dates referred to in the preceding sentence, the Administrator shall issue a public report specifying the number of allowances to be deducted from the Small System Account for units for which an election is in effect under this paragraph, the number of allowances previously deducted from the Account, the number of allowances remaining available in the Account, and the projected period for which allowances will be available in the Account under this paragraph.

(C)(i) The Administrator is authorized, on petition of an owner or operator of a unit with a nameplate capacity below 75 Mwe that is part of an electric utility system as described to clause (ii) that is particularly well controlled and primarily dependent on units with a nameplate capacity below 75 Mwe, to treat any such unit as a unit owned by a utility referred to in subparagraph (A) for purposes of participation in the Small System Account so long as such units do not exceed a 2.5 lb/mmBtu emission rate for sulfur dioxide.

(ii) The electric utility system referred to in clause (i) is any system (I) which, as of the date of the enactment of the Clean Air Act Amendments of 1990, had at least 20 percent of its fossil-fuel capacity controlled by flue gas desulfurization devices, (II) which has more than 10 percent of its fossil-fuel capacity consisting of coal-fired units of less than 75 Mwe, and (III) which has no large units (greater than 400 Mwe) with easy or modest FGD Retrofit Cost Factors (according to the Evaluation of SO₂ EMISSIONS AND THE FGD RETROFIT FEASIBILITY AT THE 200 TOP EMITTING GENERATING STATIONS, PREPARED FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON JANUARY 10, 1986).

(D) For purposes of this paragraph, the Administrator shall establish a Small System Account which shall contain (prior to any deductions under this paragraph) total allowances equal to the difference between—

(i) 2.5 lbs/mmBtu multiplied by the baseline of each of the units subject to section 518 (relating to DOE units), and

(ii) 0.4 lbs/mmBtu multiplied by the baseline of each of such units,

multiplied by 5 and divided by 2,000 lbs per ton.

(d) Electric Utility Steam Generating Units Emitting Below 1.20 lbs/mmBtu in 1985.—

(1) In general.—Except as otherwise provided in this subsection, for each year during the Second Phase the Administrator shall allocate and issue allowances under section 503 for each existing electric utility steam generating unit with an actual 1985 sulfur dioxide emission rate below 1.20 lbs/mmBtu in an annual amount equal to the product of the unit's baseline multiplied by the unit's 1985 actual emissions rate, divided by 2,000 lbs/ton, unless the owner or operator of the unit elects an alternative allowance amount under subsection (e). Such election and any other election under subsection (e), shall be made no later than March 1, 1991.

(2) 100 percent gas units.—Allowances shall not be required during the Second Phase for, and the Administrator shall not allocate or issue Second Phase allowances for, an electric utility steam generating unit with an actual 1985 sulfur dioxide emission rate below 0.20 lbs/mmBtu which burns only natural gas as a fuel and which burned only natural gas as a fuel during the calendar years 1985 through 1987. If a unit covered by this paragraph exceeds any fuel or emissions requirement set forth in this subsection, this subsection shall not apply and the unit shall be treated as a new electric utility steam generating unit required to obtain allowances under this title.

(3) Certain ultra clean units with low capacity factors in 1985.—For the purposes of this section, in the case of any unit operated by a utility that furnishes electricity, electric energy, steam, and natural gas within an area consisting of a city and 1 contiguous county, and in the case of any unit owned by a State authority, the output of which unit is furnished within that same area consisting of a city and 1 contiguous county, the Administrator shall allocate and issue under section 503 from the reserve under paragraph (5), to the extent allowances are available in such reserve, in addition to the allowances otherwise allocated to such units under this section, 7,000 allowances to the utility and 2,000 allowances to the State authority. Such allowances shall be hereinafter referred to in this subsection as “additional allowances”.

(4) Units which converted to coal.—For each year during the Second Phase, the Administrator shall allocate and issue under section 503 from the reserve under paragraph (5), to the extent allowances are available in such reserve, allowances for each

existing utility unit located east of the Mississippi that has completed conversion from predominantly gas fired operation to coal fired operation between January 1, 1985, and December 31, 1987, for which there has been issued a proposed or final prohibition order pursuant to section 301(b) of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8301 et seq., repealed 1987) in an annual amount equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of 1.20 lbs/mmBtu or the unit's allowable sulfur dioxide emissions rate, divided by 2,000 lbs/ton, unless the owner or operator of such unit has obtained allowances equal to its actual emissions. Allowances allocated and issued under this paragraph to any such unit that are additional to the allowances which would otherwise be issued to the unit under this section shall be hereinafter in this subsection referred to as "additional allowances".

(5) Special reserve for additional allowances under paragraphs (3) and (4).—For purposes of allocating and issuing the additional allowances referred to in paragraphs (3) and (4), the Administrator shall reserve from the allowances allocated and issued during the Second Phase to units referred to in section 503(i)(3) allowances equal to 13,300 tons per year. For purposes of adjusting the allowances issued under this Act pursuant to section 503(i)–

(A) the additional allowances allocated and issued to any unit under paragraph (3) and (4) shall be treated as allowances for units referred to in section 503(i)(3) and shall not be treated as allowances for units referred to in section 503(i)(2), but

(B) such additional allowances shall not be subject to adjustment and reallocation under section 503(i).

Nothing in the preceding sentence shall be construed to affect the application of section 503(i) or any other provision of this title to allowances allocated and issued to units referred to in paragraph (3) or (4) which are not additional allowances within the meaning of paragraph (3) or (4).

(c) Election for Certain Units Emitting Below 1.20 lbs/mmBtu–

(1) Coal units emitting 0.6 or less.—For the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is a coal-fired unit with an actual 1985 sulfur dioxide emission rate of 0.60 lbs/mmBtu or less, the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of the rate computed under subparagraph (A) multiplied by the fuel consumption computed under subparagraph (B), divided by 2,000 lbs/ton.

(A) The rate computed under this paragraph shall be the most stringent of:

(i) 0.60 lbs/mmBtu, or

(ii) the most stringent emission rate (if any) (in lbs/mmBtu) applicable to the unit under the applicable implementation plan, as in effect on December 31, 1989, based on documentation in existence before January 1, 1990.

(B) The fuel consumption computed under this subparagraph shall be one of the following (as elected by the owner or operator):

(i) the unit's fuel consumption at a 60 percent capacity factor, or

(ii) the unit's baseline multiplied by 120 percent.

An election to use either clause (i) or (ii) for purposes of this subparagraph for any unit owned by any owner or operator shall apply with respect to all other units owned or operated by the owner or operator which are subject to this paragraph.

(2) Coal units emitting 0.6 to 1.2.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is a coal-fired unit with an actual 1985 sulfur dioxide emission rate greater than 0.6 lbs/mmBtu (but less than 1.2 lbs/mmBtu), the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of the unit's 1985 actual emissions rate, multiplied by one of the following (as elected by the owner or operator), divided by 2,000 lbs/ton:

(A) the unit's fuel consumption at a 60 percent capacity factor, or

(B) the unit's baseline multiplied by 120 percent.

An election to use either subparagraph (A) or (B) for purposes of this paragraph for any unit owned by any owner or operator shall apply with respect to all other units which are owned or operated by that owner or operator and which are subject to this paragraph.

(3) Certain Oil or gas units emitting 0.6 or less.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is an oil- or gas-fired unit with an actual 1985 sulfur dioxide emission rate of 0.6 lbs/mmBtu or less, the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of 120 percent of the unit's baseline multiplied by the most stringent of the following, and divided by 2,000 lbs/ton:

(A) 0.6 lbs/mmBtu.

(B) The most stringent emission rate for fuel oil, if any, in lbs/mmBtu applicable to the unit under the applicable implementation plan in effect on December 31, 1989, based on documentation in existence before January 1, 1990.

No unit which burned as its fuel during the period 1980 through 1989 on average more than 90 percent natural gas may elect to have allowances allocated and issued as provided in this paragraph.

(4) Oil or gas units emitting 0.6 to 1.2.—During the Second Phase, at the election of the owner or operator of an existing electric utility steam generating unit which is an oil- or gas-fired unit with an actual 1985 sulfur dioxide emission rate greater than 0.6 lbs/mmBtu (but less than 1.2 lbs/mmBtu), the Administrator shall allocate and issue allowances under section 503 to the unit in an annual amount equal to the product of 120 percent of the unit's baseline, multiplied by the unit's actual 1985 emissions rate, divided by 2,000 lbs/ton.

(f) Certain Units Treated as Existing Units.—For the Second Phase, the Administrator shall allocate and issue allowances under section 503 to each electric utility steam generating unit which is listed in Table B of this subsection in an annual amount equal to the amount specified in Table B.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

For purposes of making adjustments under section 503(i), the units referred to in this subsection shall be treated as units described in section 503(i)(3). No allowances shall be allocated under this subsection to a unit listed in Table B that fails to commence commercial operation before December 31, 1995.

(g) Baseline for Certain Units in State Experiencing 25 Percent Population Growth.—(1) For each existing electric utility steam generating unit in commercial operation before January 1, 1985 and operating in a State which—

(A) has experienced population growth in excess of 25 percent between 1980 and 1988 (according to State Population and Household Estimates, with Age, Sex, and Components of Change: 1981–1988, issued by the United States Department of Commerce), and

(B) had an installed electric generation capacity of more than 30,000,000 kw in 1988,

the baseline for purposes of this section shall be the annual average fuel consumption (in mmBtu) during any 3 consecutive calendar years between 1980 and 1989 (as selected by the owner or operator) in lieu of the years otherwise applicable for such purposes under section 502(a)(8). Such election shall be made not later than March 1, 1991.

(2) The Administrator shall calculate the amount by which annual allowances allocated to the units referred to in paragraph (1) exceeds the amount of annual allowances which would be allocated to such units in the absence of paragraph (1). The amount of such excess allowances (if any) issued to such units shall be adjusted pro rata to ensure that the total of such excess allowances allocated to all such units will equal 40,000. For such purposes, the term "pro rata" refers to the ratio which the allowances which would be issued to each such unit (without regard to the 40,000 allowance limitation) bears to the allowances which would be issued to all such units (without regard to such 40,000 allowance limitation).

(3) In order to allocate and issue allowances to the units referred to in paragraph (1), the Administrator shall reserve allowances in the amount of 40,000 each year from the Second Phase allowances withheld under section 519(b).

(h) Interruptible Gas Units.—(1) This subsection shall apply only to electric utility steam generating units which burned as their fuel during the period 1980 through 1989 more than 90 percent natural gas, and which purchase natural gas under an interruptible contract. Each such unit shall be referred to in this subsection as an "interruptible gas unit".

(2) So long as sufficient allowances are available in the Reserve for Gas Supply Interruptions established under section 503(i)(5), the Administrator shall issue to the owner or operator of any interruptible gas unit (and deduct from such reserve) allowances for emissions of sulfur dioxide for any year during the Second Phase at a tonnage level in excess of the allowances otherwise allocated and issued to the unit under this section if each of the following requirements are met:

(A) The excess emissions referred to in this paragraph are temporary emissions during a period or periods in which natural gas supplies are interrupted (as certified by the owner or operator in such form as the Administrator may require) under—

(i) an interruptible contract, or

(ii) State law,

by reason of either weather or other unusual factors not under the control of the owner or operator of the unit. The total of the periods of such interruption in any calendar year may not exceed 25 percent of that calendar year (hereinafter in this paragraph referred to as the "interruption period").

(B) During the interruption period, emissions of sulfur dioxide from the unit shall not exceed the lower of—

(i) 0.5 lbs per million Btu, or

(ii) the most stringent rate applicable to the unit under the applicable implementation plan.

(C) The unit burns as its fuel more than 90 percent natural gas during any period other than the interruption period.

(3) If an interruptible gas unit fails to meet any requirement of this subsection, the owner or operator of the unit shall be required to obtain allowances under this title for the excess emissions referred to in paragraph (2).

SEC. 506. NITROGEN OXIDES EMISSION REDUCTION PROGRAM.

(a) Program.—Emission rate requirements for nitrogen oxides shall be met in the Second Phase by coal-fired electric utility steam generating units with a nameplate capacity of 75 MWe or greater. Emission rate requirements under this section shall

not apply to cyclone or wet-bottom boilers unless the Administrator promulgates a rule under subsection (c), and includes in such rule the finding referred to in the last sentence of subsection (c). For cell burners, any such emission rate requirement shall be based on commercially available burner technology.

(b) **No₅x EMISSION RATE LIMITATIONS.**—The Administrator shall, by rule, within 3 years after the enactment of the Clean Air Act Amendments of 1990 establish a program under this section and section 111 to reduce total nitrogen oxide emissions by approximately 2,500,000 tons below 1989 projected emissions for calendar year 2000. Pursuant to such program, the Administrator shall establish emission rate limitations under this section, to take effect at the beginning of Second Phase based on the application of low nitrogen oxides burner technology for each type of boiler. In establishing such limitations the Administrator shall take into consideration boiler age and configuration, safety, efficiency, technology, and other relevant factors. In addition, if necessary for purposes of such program, the Administrator shall, consistent with the requirements of section 111, revise new source performance standards under section 111 for emissions of oxides of nitrogen from electric utility steam generating units to insure that such new source performance standards are no less stringent than the emission rate limitations required under this subsection. Any unit subject to an emission rate limitation under this section shall not be an affected unit for nitrogen oxides for purposes of this title, except as provided in section 509.

(c) **Adjustment of 2,500,000 Ton Reduction.**—The Administrator may promulgate a rule in calendar year 1996 or any time thereafter increasing the tonnage of reductions in oxides of nitrogen required to be achieved under this section from 2,500,000 tons up to not more than 4,000,000 tons if the Administrator finds, in such rule, that such reductions are—

(1) needed either for purposes of reducing acid deposition or for meeting the national primary ambient air quality standard for ozone, and

(2) cost effective, taking into consideration alternative means of reducing such deposition or achieving such standard under this Act, and the practicability of the necessary control technology.

In making any finding under item (1) above, the Administrator shall take into account (A) the reductions in oxides of nitrogen achieved or expected to be achieved under other provisions of this Act and (B) the findings of the study under section 185B. Such rule shall include an explanation of the basis for such findings. To provide such reductions, the Administrator (as part of such rule) may establish or revise new source performance standards under section 111 for nitrogen oxide control. Such rule shall provide reasonable lead time, taking into consideration safety, costs, technology, and other relevant factors, including the requirements of subsection (b). Any such rule may apply to cyclone or wet-bottom boilers, or both, if the Administrator finds that methods are available for reducing emissions from such boilers that are as cost effective as the application of low nitrogen oxides burner technology in the case of wall-fired or tangentially-fired boilers.

SEC. 507. PERMITS AND COMPLIANCE PLANS.

(a) **Permit Program.**—The provisions of this title shall be implemented, subject to section 503, by permits issued to units subject to this title in accordance with the provisions of title IV, as modified by this title. Any such permit issued by the Administrator, or by a State with an approved permit program, shall prohibit—

(1) annual emissions of sulfur dioxide or nitrogen oxides (if applicable) in excess of the allowances allocated to that unit for the year concerned and issued to the owner or operator of the unit for that year, plus or minus the allowances transferred to or from the unit for that year or carried forward to that year from prior years;

(2) exceedances of applicable emissions rates, and

(3) contravention of any other provision of the permit.

Permits issued to implement this title shall be issued for a period of 5 years, notwithstanding title IV.

(b) Compliance Plan.—Each initial permit application shall be accompanied by a compliance plan for the source to comply with its requirements under this title. Where an affected source consists of more than one affected unit, such plan shall cover all such units, and for purposes of section 402(c), such source shall be considered a “facility”. Nothing in this section regarding compliance plans or in title IV shall be construed as affecting allowances. The compliance plan shall provide all necessary information on the schedule and means by which the source will achieve compliance with its First or Second Phase requirements, including specification of any additional allowances beyond the initial allocation that will be used to achieve compliance. The Administrator may also require—

(1) for a source, a demonstration of attainment of national ambient air quality standards, and

(2) from the owner or operator of two or more affected sources, an integrated compliance plan providing an overall plan for achieving compliance at the affected sources.

(c) First Phase Permits.—The Administrator shall issue permits to First Phase affected sources under section 504.

(1) Permit application and compliance plan.—(A) Not later than 27 months after the date of the enactment of the Clean Air Act Amendments of 1990, the owner or operator of each First Phase affected source under section 504 shall submit a permit application and compliance plan for that source in accordance with regulations issued by the Administrator under paragraph (3). The permit application and the compliance plan shall be binding on the owner or operator for purposes of this title and section 402(a), and shall be enforceable in lieu of a permit until a permit is issued by the Administrator for the source.

(B) In the case of a compliance plan for a First Phase affected source under section 504 for which the owner or operator proposes to meet the requirements of that section by reducing utilization of the unit by 20 percent or more, as compared with the baseline prescribed in section 502(8)(A), or by shutting down the unit, the owner or operator of the unit shall include in the compliance plan a specification of the means to compensate for the reduced output of the affected source, including a specification of (i) any other source of electric energy, (ii) any energy conservation or load management programs, and (iii) any imported energy or the other energy that will provide electrical generation. The affected source, and any unit to be used for such compensating generation, if not otherwise affected under section 504, shall be deemed affected under section 504 and subject to the Phase I requirements of this title, except that allowances shall be allocated to such unit in an amount equal to the product of the unit's baseline multiplied by the unit's actual 1985 emission rate, divided by 2000 lbs/ton.

(2) EPA action on compliance plans.—If the Administrator determines that a proposed compliance plan does not satisfy the requirements of this title or title IV, the plan shall be disapproved within 6 months after receipt of a complete submission. If a plan is disapproved, it may be resubmitted for approval with such changes as the Administrator shall require consistent with the requirements of this title and within such period as the Administrator prescribes as part of such disapproval.

(3) Regulations; issuance of permits.—Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations, in accordance with title IV, to implement a Federal permit program to issue permits for affected sources under this title. Following promulgation, the Administrator shall issue a permit to implement the requirements of section 504 and the allowances provided under section 503 to the owner or operator of each affected source under section 504. Such a permit shall supersede any permit application and compliance plan submitted under paragraph (1).

(4) Fees.—During the First Phase, no fee shall be required to be paid under section 402(b)(3) or under section 110(a)(2)(L) with respect to emissions from any unit which is a First Phase affected unit under section 504.

(d) Governor's Approval.—Any owner or operator submitting a First Phase permit application and compliance plan under subsection (c) shall request an approval from the Governor of any State within which the source is located that the application and compliance plan are consistent with State law. Where required by State law, the Governor's approval may preclude the use of coal produced outside the State at the source. The Governor's approval shall be a condition of any permit issued by the Administrator to the source unless the Administrator, within 60 days after receipt, notifies the Governor that the approval is inconsistent with the provisions or purposes of the Act or with other compelling national interest. In the event that the Governor fails or refuses to act on a request for approval within 90 days after receipt of the request, the requirements of this subsection shall be waived with respect to such application and compliance plan.

(e) Second Phase Permits.—(1) To provide for permits for (A) new electric utility steam generating units required under section 503(e) to have allowances, (B) affected units or sources under section 505, and (C) existing coal-fired electric utility steam generating units subject to nitrogen oxide emission reductions under section 506, each State in which one or more such units or sources are located shall submit in accordance with title IV, a permit program for approval as provided by that title. Upon approval of such program, for the units or sources subject to such approved program the Administrator shall suspend the issuance of permits as provided in section 402(e) of title IV.

(2) The owner or operator of each affected source under section 505 shall submit a permit application and compliance plan for that source to the permitting authority, not later than January 1, 1996.

(3) Not later than December 31, 1997, each State with an approved permit program shall issue permits to the owners or operators of affected sources under section 505 (Second Phase affected sources) that satisfy the requirements of title IV and this title and that submitted to such State a permit application and compliance plan pursuant to paragraph (2). In the case of a State without an approved permit program by July 1, 1996, the Administrator shall, not later than January 1, 1998, issue a permit to the owner or operator of each such affected source. In the case of affected sources for which applications and plans are timely received under paragraph (2), the permit application and the compliance plan, including amendments thereto, shall be binding on the owner or operator and shall be enforceable as a permit for purposes of this title and section 402(a) until a permit is issued by the permitting authority for the affected source. The provisions of section 558(c) of title V of the United States Code (relating to renewals) shall apply to permits issued by a permitting authority under this title and title IV.

(4) The permit issued in accordance with this subsection for an affected source shall provide that the affected units at the affected source may not emit an annual tonnage of sulfur dioxide in excess of the allowances allocated to each such unit and issued to the source for the year concerned, plus or minus the allowances transferred to or from such units for that year or carried forward from prior years. In the case of a unit referred to in section 505(c)(2), relating to election for small systems, the permit shall also provide that such unit may not exceed the annual emissions rate specified in that section.

(f) Units Subject to Certain Other Limits.—The owner or operator of any unit subject to an emission rate requirement under section 506 shall submit a permit application and compliance plan for such unit to the permitting authority, not later than January 1, 1998. The permitting authority shall issue a permit to the owner or operator that satisfies the requirements of title IV and this title, including any appropriate monitoring and reporting requirements. Unless designated under section 509, such a unit shall not receive, and is not obligated to emit oxides of nitrogen in conformance with, allowances issued for oxides of nitrogen under this title.

(g) New Units.—The owner or operator of each source that includes a new electric utility steam generating unit shall submit a permit application and compliance plan to the permitting authority not later than 24 months before the later of (1) the date of the commencement of the Second Phase, or (2) the date on which the unit commences operation. The permitting authority shall issue a permit to the owner or operator of the unit that satisfies the requirements of title IV and this title.

(h) Amendment of Application and Compliance Plan.—At any time after the submission of an application and compliance plan under this section, the applicant may submit a revised application and compliance plan, in accordance with the

requirements of this section. In considering any permit application and compliance plan under this title, the permitting authority shall ensure coordination with the applicable electric ratemaking authority, in the case of regulated utilities, and with unregulated public utilities.

(i) Prohibition.—(1) It shall be unlawful for an owner or operator required to submit a permit application or compliance plan under this title to fail to submit such application or plan in accordance with the deadlines specified in this section or to otherwise fail to comply with regulations implementing this section.

(2) It shall be unlawful for any person to operate any source subject to this title except in compliance with the terms and requirements of a permit application and compliance plan (including amendments thereto) or permit issued by the Administrator or a State with an approved permit program. For purposes of this subsection, compliance, as provided in section 404(g), with a permit issued under title IV which complies with this title for sources subject to this title shall be deemed compliance with this subsection as well as section 402(a).

(3) In order to ensure reliability of electric power, nothing in this title or title IV shall be construed as requiring termination of operations of an electric utility steam generating unit for failure to have an approved permit or compliance plan, except that any such unit may be subject to the applicable enforcement provisions of section 113.

SEC. 508. REPOWERED UNITS.

(a) Availability.—Not later than January 1, 1998, the owner or operator of any Second Phase affected unit may demonstrate to the permitting authority that such unit will be repowered with a qualifying clean coal technology to comply with the requirements applicable to that unit pursuant to section 505 or 506. The owner or operator shall, as part of any such demonstration, provide, not later than December 31, 2000, satisfactory documentation of a preliminary design and engineering effort for such repowering, an executed contract for the majority of the equipment to repower such unit, and such other information as the Administrator may require by regulation. The replacement of an existing electric utility steam generating unit with a new electric utility steam generating unit using a repowering technology referred to in section 502(a)(14) which is located at a different site, shall be treated as repowering of the existing unit for purposes of this title and such replacement unit shall not be treated as a new electric utility steam generating unit within the meaning of section 502 if—

(1) the replacement unit is designated by the owner or operator to replace such existing unit,

(2) the existing unit is retired from service on or before the date on which the designated replacement unit enters commercial operation, and

(3) the designated replacement unit is located in the same air quality control region as the existing unit.

(b) Extension.—(1) An owner or operator satisfying the requirements of subsection (a) for any unit shall be granted an extension of the date on which such unit is required to comply with Second Phase requirements. Such date shall be extended from December 31, 2000 to December 31, 2003. The extension shall be specified in the permit issued to the source under section 507, together with any compliance schedule and other requirements, consistent with this title, necessary to meet Second Phase requirements by the extended date. Any unit that is granted an extension under this section shall not be eligible for a waiver under section 111(j).

(2) If (A) the owner or operator of an existing unit has been granted an extension under paragraph (1) in order to repower such unit with a clean coal unit, and (B) such owner or operator demonstrates to the satisfaction of the Administrator that the repowering technology to be utilized by such unit has been properly constructed and tested on such unit, but nevertheless has been unable to achieve the emission reduction limitations and is economically or technologically infeasible, such existing

unit may be retrofitted or repowered with equipment or facilities utilizing another clean coal technology or other available control technology.

(c) Control Requirements.—A repowered unit replacing an existing unit qualifying for an extension under this section shall not be required to meet any standard of performance under section 111. A repowered unit replacing an existing unit qualifying for an extension under this section shall not be subject to the requirements of part C or D of this Act if the projected emissions from the repowered unit will not result in an increase in emissions, relative to predemonstration actual emissions of the existing unit, as determined by the Administrator, of any pollutant regulated under this Act. For purposes of calculating projected emissions for purposes of this paragraph, a 70 percent capacity factor shall be used. Notwithstanding the provisions of this subsection, no new unit (1) designated as a replacement for an existing unit, (2) qualifying for the extension under subsection (b), and (3) located at a different site than the existing unit shall receive an exemption from the requirements imposed under section 111 and parts C and D of the Act.

(d) Allowances.—(1) For the 3-year extension period granted to an affected unit under this section, the Administrator shall issue to the owner or operator of the affected unit, annual allowances for sulfur dioxide equal to the affected unit's baseline multiplied by the lesser of—

(A) emissions limit for sulfur dioxide applicable to the unit under the applicable implementation plan, or

(B) its actual emission rate for 1996.

Such allowances may not be transferred or used by any other source to meet requirements of this title.

(2) The owner or operator of the affected unit for which an extension has been granted under this section shall notify the Administrator 60 days in advance of the date on which the affected unit is to be removed from operation to install the repowering technology. Effective on that date, allowances shall be issued for the unit in the tonnage calculated by multiplying 1.20 lbs/mmBtu times the unit's baseline, divided by 2,000 lbs/ton. Allowances for the year in which the source is removed from operation to install the repowering technology shall be prorated accordingly, and are transferable.

(3) In the case of any unit for which an extension has been granted under this section, the allowances allocated and issued for calendar years after repowering is complete shall be equal to 1.20 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000 lbs/ton.

(4) Allowances shall be allocated and issued under this section for a designated replacement unit which replaces an existing unit (as provided in the last sentence of subsection (a)) in lieu of allocating and issuing allowances for the existing unit.

(5) For the purpose of making adjustments under section 503(i), the units with an extension under this subsection shall be treated as having allowances allocated and issued under paragraph (3).

(e) Certain Units Selected for Negotiations.—For purposes of allocating and issuing Second Phase allowances under this title, in the case of any oil and gas fired electric utility steam generating unit which has been selected for negotiations leading to award of clean coal demonstration funding by the Secretary of Energy before July 27, 1989, the Administrator shall allocate allowances to such unit in accordance with paragraph (3) of subsection (d), in lieu of allocating allowances to that unit pursuant to section 505, but no such unit shall be eligible for an extension under this section.

(f) Prohibition.—It shall be unlawful for the owner or operator of a repowered source to fail to comply with the requirements of this section, and any regulations to implement this section.

SEC. 509. ELECTION FOR ADDITIONAL SOURCES.

(a) Applicability.—The owner or operator of any existing unit or process source that is not an affected unit for sulfur dioxide or oxides of nitrogen, or both as the case may be, may elect to designate that unit or process source as an affected unit under this section for such pollutant or pollutants. Such an election may be submitted to the Administrator for approval anytime after promulgation of regulations under this section. The Administrator shall approve a designation that meets the requirements of this section. Following approval, such designated unit or process source shall be treated as an affected unit for purposes of this title and shall receive allowances as provided in this section for periods following such approval.

(b) Establishment of Baseline.—The baseline for a unit designated as an affected unit under this section shall be established by the Administrator by regulation, based on fuel consumption and operating data for the unit for calendar years 1985, 1986, and 1987, or if not available, the Administrator may prescribe a baseline based on alternative representative data.

(c) Allowances for Affected Units.—(1) Allowances allocated and issued under this title for sulfur dioxide or nitrogen oxides to a unit which is an affected unit under this section shall be equal to the product of the unit's baseline multiplied by the unit's actual 1985 emission rate in lbs/mmBtu, divided by 2,000 lbs/ton.

(2) Beginning in the Second Phase, the allowances for oxides of nitrogen for a unit for which an election is in effect under this section for oxides of nitrogen shall be determined based on the rate prescribed under section 506 for any unit subject to that section and any such unit shall be required only to comply with such allowances and shall not also be subject to an emission rate requirement under section 506.

(3) This subsection shall not apply to any process source.

(d) Process Sources.—The Administrator shall establish, by regulation by 1995, a program for designation of process sources which commenced operation before the date of the enactment of the Clean Air Act Amendments of 1990 as affected units for purposes of this section. The Administrator shall define the sources that may be included (not including any unit as defined under this title), specify the emission baseline and other data requirements, prescribe CEMS or other monitoring requirements, and promulgate permit, reporting, and any other requirements necessary to implement such a program.

(e) Allowances and Permits.—The Administrator shall issue allowances to an affected unit under this section in an amount equal to the allowances calculated under subsection (c) or (d), in accordance with section 503. Section 503(i) shall not apply to the allowances issued under this section. Such allowances may be transferred and banked in accordance with the provisions of this title. The permitting authority shall issue a permit for units and process sources which are designated as affected units under this section in the same manner as provided in section 507.

(f) Limitation.—Any unit or process source which is designated under this section as an affected unit shall not transfer or bank allowances produced as a result of emission reductions resulting from reduced utilization or shutdown or compliance with any other provisions of this Act (other than section 112 or this title), except that in the case of a reduced utilization or shutdown such allowances may be transferred or carried forward for use in subsequent years to the extent that—

(1) any such reduced utilization or shutdown results from the replacement of thermal energy from the unit designated under this section with thermal energy generated by any other unit or units subject to the requirements of this title, and

(2) the designated unit's allowances are transferred or carried forward for use only at such other replacement unit or units.

(g) Implementation.—The Administrator shall issue regulations to implement this section not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990.

SEC. 510. EXCESS EMISSIONS ENFORCEMENT FEE.

(a) Excess Emissions Enforcement Fee.—The owner or operator of any affected source that emits sulfur dioxide or nitrogen oxides for any calendar year in excess of the allowances it possesses for that calendar year (hereinafter referred to as “excess emissions”) shall be liable for the payment of an excess emission fee. That fee shall be equal to the excess emissions multiplied by \$2,000. The fee shall be due and payable without demand to the Administrator as provided in regulations issued by the Administrator. Any such funds shall be deposited in the United States Treasury pursuant to 31 U.S.C. 3302 (the “Miscellaneous Receipts Act”). Any fee due and payable under this section shall not diminish any fine, penalty or fee imposed on the same source under any other section of this Act.

(b) Excess Emissions Offset.—The owner or operator of any affected source liable for payment of a fee under subsection (a) shall also offset the excess emissions by reducing emissions of the air pollutant concerned by an equal tonnage amount in the following calendar year, or such longer period as the Administrator may prescribe. The owner or operator of the source shall, within 60 days after the end of the year in which such excess emissions occurred, submit to the Administrator, and the State, a plan to achieve the required offsets. The Administrator shall also deduct allowances equal to the excess emissions tonnage from those issued for the source for the calendar year, or succeeding years, following the year in which the excess emissions occurred.

(c) Fee Adjustment.—The Administrator shall, by regulation, adjust the fee specified in subsection (a) for inflation, based on the Consumer Price Index, beginning in calendar year 1996 and annually thereafter.

(d) Prohibition.—It shall be unlawful for the owner or operator of any source liable for a fee and offset under this section to fail to pay the fee under subsection (a) or to fail to provide, and thereafter comply with, a plan as required by subsection (b), or to fail to offset excess emissions as required by subsection (b).

(e) Savings Provision.—Nothing in this title shall limit or otherwise affect the application of section 113 or section 304.

SEC. 511. MONITORING, REPORTING, AND RECORDKEEPING REQUIREMENTS.

(a) Applicability.—All affected sources subject to this title shall be required to install and operate CEMS and quality assure the data for sulfur dioxide, nitrogen oxides, opacity and volumetric flow for each unit subject to this title. The Administrator shall, by regulations issued not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, specify the requirements for CEMS, for alternative methods that provide sufficiently reliable and timely information, and for recordkeeping and reporting of information from such systems. Where 2 or more units utilize a single stack, a separate CEMS shall not be required for each unit, and for such units the regulations shall require that the owner or operator collect sufficient information to permit reliable compliance determinations for each such unit.

(b) First Phase Requirements.—Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, the owner or operator of each unit subject to section 504 shall install and operate CEMS, quality assure the data, and keep records and report in accordance with regulations issued under subsection (a).

(c) Second Phase Requirements.—Not later than January 1, 1995, the owner or operator of each source subject to sections 505 or 506 which has not previously met the requirements of subsection (a) shall comply with those requirements. Upon commencement of commercial operation of each new electric utility steam generating unit, the unit shall comply with the requirements of subsection (a).

(d) Unavailability of CEMS.—If CEMS data is not available for any affected unit during any period of a calendar year in which such data is required under this title, and the owner or operator cannot provide information, satisfactory to the

Administrator, on emissions during that period, the Administrator shall deem the unit to be operating in an uncontrolled manner and, by regulation, prescribe means to calculate emissions for that period. The owner or operator shall be liable for excess emissions fees and offsets under section 510 in accordance with such regulation which shall be issued not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990.

(e) Prohibition.—It shall be unlawful for the owner or operator of any source subject to this title to operate a source without complying with the requirements of this section, and any regulations implementing this section.

SEC. 512. COMPLIANCE WITH OTHER PROVISIONS.

(a) General.—Except as otherwise expressly provided in this Act, compliance with the requirements of this title shall not exempt or exclude the owner or operator of any source subject to this title from compliance with any other applicable requirements of this Act.

(b) New Source Review of Compliance.—No physical change in, or change in the method of operation of, a stationary source for purposes of reducing emissions from such source in order to comply with this title shall be treated as a modification for purposes of section 111 or part C of title I of this Act if such change does not increase the potential emissions of any air pollutant from such source above the potential emissions before the change.

SEC. 513. ENFORCEMENT.

A violation by the owner or operator of a source subject to this title of the prohibitions of, requirements of, or regulations promulgated pursuant to, this title shall be a violation of this Act. Operation of an affected source to emit sulfur dioxide or nitrogen oxides in excess of its allowances shall be deemed a violation, with each ton emitted in excess of allowances held constituting a separate violation.

SEC. 514. REPORT TO CONGRESS.

Not later than January 1, 2003, the Administrator shall assess and submit a report to Congress on the environmental effects of the emission reductions under this title.

SEC. 515. CLEAN COAL TECHNOLOGY INCENTIVES.

(a) Revised Regulations for Clean Coal Technology Demonstrations.—The Administrator shall promulgate regulations under this section to revise requirements under section 111 and parts C and D of title I, as appropriate, to facilitate temporary and permanent clean coal demonstration projects, consistent with the attainment and maintenance of national ambient air quality standards and prevention of significant deterioration as provided in subsections (b) and (c). Such regulations shall address physical or operational changes to existing facilities for the sole purpose of installation, operation, cessation, or removal of a clean coal technology demonstration project. For the purposes of this section, a clean coal technology demonstration means—

- (1) a project using funds appropriated under the heading “Department of Energy—Clean Coal Technology”, or
- (2) a similar project funded through appropriations for the Environmental Protection Agency.

(b) Temporary Projects.—Installation, operation, cessation, or removal of a temporary clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with all State implementation plans and other

requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated, shall not subject such facility to the requirements of section 111 or parts C or D of title I.

(c) **Permanent Projects.**—Any permanent demonstration project that complies with all State implementation plans and other requirements necessary to attain and maintain the national ambient air quality standards shall not be subject to the requirements of part C or D of title I or section 111 if the projected emissions from the project will not result in an increase in emissions, relative to its predemonstration actual emissions, as determined by the Administrator, of any pollutant regulated under this Act. For purposes of calculating projected emissions for purposes of this paragraph, a 70 percent capacity factor shall be used.

(d) **Preexisting Requirements.**—Any clean coal demonstration technology project shall be subject to its preexisting obligations under this Act until such time as it qualifies under regulations implementing this section for alternate requirements.

(e) **Phase I Affected Sources.**—(1) A clean coal technology demonstration project defined in subsection (A)(1) of this section may use funds allocated to procurements issued subsequent to May 1, 1989, only if the project is installed at a facility owned or operated by the owner of an affected source subject to section 504(a) (relating to First Phase sulfur dioxide tonnage allowances).

(2) A clean coal technology demonstration project defined in subsection (a)(2) of this section may be funded after enactment of the Clean Air Act Amendments of 1990 only if the project is installed at a facility owned or operated by the owner or operator of an affected source subject to section 504(a) (relating to First Phase sulfur dioxide tonnage allowances).

SEC. 516. SEVERE ENERGY SUPPLY INTERRUPTIONS AND ENERGY FUEL SUPPLY SHORTAGES.

(a) **EPA Order.**—(1) The owner or operator of any unit or source required to have allowances under this title as a condition of operation may apply to the Administrator for an order under this subsection whenever, by reason of one or more of the conditions specified in subparagraph (A), (B), or (C) of paragraph (2), the total calendar year emissions of sulfur dioxide from such units and sources owned or operated by such owner or operator exceeds the allowances held by such owner or operator for that calendar year (including allowances held in reserve for contingencies). If, upon such an application, the Administrator finds, after consultation with the Secretary of Energy, that by reason of one or more of such conditions—

(A) the ability of the owner or operator to comply with the requirements of this title has been significantly impaired,

(B) the unit or source has emitted an amount of sulfur dioxide or oxides of nitrogen which exceeds the allowances held by the owner or operator (including allowances held in reserve for contingencies), and

(C) the owner or operator had, before the occurrence of the condition referred to in subparagraph (A), (B), or (C) of paragraph (2), established a reasonable reserve for contingencies but that reserve did not contain sufficient allowances to cover such excess,

the Administrator shall promptly issue an order providing that allowances shall not be required to authorize such excess emissions. The Administrator shall act upon any application under this subsection in an expedited manner. Upon issuance of any such order, the emissions covered by such order in excess of the allowances held by the owner or operator shall not be treated as a violation for purposes of section 513 or for purposes of any other provision of this Act.

(2) The conditions referred to in paragraph (1) are as follows:

(A) A severe energy supply interruption (as defined in section 3(8) of the Energy Policy and Conservation Act) has been declared or a determination has been published by the President (including the basis of such determination) that there exists a national or regional fuel supply shortage which is, or is likely to be, of significant scope and duration and of an emergency

nature and it causes or may cause a major adverse impact on public health or safety or welfare or on the economy and results, or is likely to result, from an interruption in the supply of fuel or from sabotage or an act of God.

(B) A catastrophe has occurred that the President finds gives rise to an emergency (as defined in section 102(1) of the Disaster Relief and Emergency Assistance Act) in any part of the United States that requires an assured supply of electricity to save lives and protect property, public health and to avert or lessen the threat of a major disaster.

(C) A catastrophe has occurred which the President finds gives rise to a major disaster (as defined in section 102(2) of the Disaster Relief and Emergency Assistance Act) in any part of the United States that requires an assured supply of electricity to alleviate the damage, loss, hardship, or suffering caused by such major disaster.

Any order under this subsection shall include such terms and conditions as the Administrator, in consultation with the Secretary of Energy, deems necessary to lessen or minimize the impact of the order consistent with the purposes of this title. The Administrator shall submit a report to Congress on all orders issued under this section. The authority of the President under this section may not be delegated to any other person.

(b) Gas Curtailments.—Notwithstanding any emission limitation or allowance requirement applicable under this title, any electric utility steam generating unit that burned as its fuel during the period 1985 through 1987 more than 90 percent natural gas may emit during any natural gas supply emergency (as defined in title III of the Natural Gas Policy Act of 1978), sulfur dioxide at the lower of—

(1) 0.5 lbs per million Btu, or

(2) the most stringent rate applicable to the unit under the applicable implementation plan

if the unit burns oil during such curtailment. Notwithstanding section 505 no such unit shall be treated as a new unit required to obtain allowances under this title by reason of this subsection.

SEC. 517. PROTECTION OF LOW-INCOME HOUSEHOLDS.

(a) Application.—This section shall apply to each electric utility, subject to rate regulation by a State regulatory authority whose annual sales of electric energy exceed 500,000,000 kilowatt hours.

(b) Identification of Expenditures.—Each State regulatory authority may, in accordance with the applicable procedures thereof, require each utility referred to in subsection (a) to identify, for purposes of this subsection, expenditures needed for purposes of compliance with First Phase or Second Phase of this title and to identify on an annual basis the expenditures made for such purposes within the past 12 months and the expenditures projected to be made for such purposes within the succeeding 24 months. These expenditures shall include both capitalized items and expensed items. Normal cost allocation principles shall apply where costs incurred may be related in part to other purposes or requirements. Such authority may make exceptions from the requirements of this section where the authority determines that the amount of such expenditures cannot be reasonably segregated and identified.

(c) Treatment of Expenditures.—No utility which has identified expenditures under subsection (b) may, as determined by such authority, include in the rates and charges imposed on any income-eligible retail ratepayer any portion of the expenditures made by such utility to comply with this title. There shall be provision for notice and a public hearing on the sole issue of whether to exempt low-income residents. Any decision whether or not to exempt low-income residents and the reasons therefor must be provided to local officials. This subsection shall apply with respect to the first utility bill submitted by the utility to an income eligible ratepayer after the documentation referred to in subsection (d) is received by the utility (or after the ratepayer is found by the utility to be automatically eligible.)

(d) Income-Eligible Retail Ratepayer.—

(1) In general.—For purposes of this section, during any 12-month period an income-eligible retail ratepayer shall be any ratepayer of an electric utility subject to the provisions of subsection (b) who provides documentation to the utility (in such form and manner as the State regulatory authority shall, by rule, specify) satisfactory to establish that such ratepayer is an individual who is eligible at the commencement of such period for benefits under any of the following:

(A) The Low-Income Home Energy Assistance Program (LIHEAP).

(B) The supplemental security income program under title XVI of the Social Security Act.

(C) Women, Infants and Children (WIC).

(D) Food stamps.

(E) Medical assistance under title XIX of the Social Security Act.

(F) The Weatherization Assistance Program (WAP).

(G) A State plan approved under section 402 of the Social Security Act (AFDC).

(2) Apartments.—Such term also includes any ratepayer who provides documentation to the utility (in such form and manner as the State regulatory authority shall, by rule, specify) satisfactory to establish that such ratepayer leases units in a multiple unit residential dwelling to individuals if # or more of the units are occupied by individuals who, at the commencement of such period, are eligible for any of the benefits referred to above.

(3) Automatic eligibility.—No documentation shall be required under this subsection in any case in which a ratepayer is known to the utility to be eligible for one of the types of assistance specified above.

(4) State, local, private nonprofit organizations.—An electric utility shall accept documentation regarding any individual ratepayer under this subsection from any State, local, or private nonprofit organization which administers any of the programs referred to in paragraph (1).

(e) Outreach.—Each utility subject to this section as provided in subsection (a) shall undertake measures, directly or through the services of low-income assistance organizations, to publicize the program under this section to the low-income community.

(f) False Documentation.—Any person who is not an income-eligible ratepayer within the meaning of subsection (d) and who fraudulently provides false documentation to an electric utility purporting to establish that such person is an income-eligible ratepayer within the meaning of subsection (d) shall be liable to the utility for an amount equal to three times the full amount of any reduction in rates obtained by reason of such false documentation.

SEC. 518. DOE UNITS.

(a) Allowance Allocations for Certain Units.—In lieu of allocating allowances to the units at the Joppa, Kyger Creek, and Clifty Creek powerplants as provided in section 504 and section 505, the Administrator shall allocate and issue First Phase and Second Phase allowances pursuant to section 503 to each such unit in an amount equal to 0.4 lbs/mmBtu multiplied by the unit's baseline, divided by 2,000.

(b) Compliance.—The Secretary of Energy shall require that affected units at each powerplant listed in Table A of section 504(a) which provides, by contract with the Secretary of Energy, more than 75 percent of the energy generated to Federal facilities on a regular basis may only utilize, for purposes of compliance with this title, a technological system of continuous emission reduction or the purchase of allowances, or any combination of the foregoing. Subject to appropriation, the Secretary of Energy shall pay the costs of construction and installation of such system of continuous emission reduction and a share of the operating costs of such system proportional to the energy purchased by the Secretary of Energy.

SEC. 519. AUCTION.

(a) Early Auction.—

(1) In general.—The Administrator, in consultation with the Secretary of the Treasury, shall conduct an auction before March 31, 1992, at which owners or operators of affected units may offer allowances for sale (hereinafter referred to as the “early auction”).

(2) Documentation.—Before the early auction, the Administrator shall issue to affected units such documentation as may be necessary for the owner or operator of such units to legally transfer through such auction their rights to receive allowances and for the Administrator to record such transfers. If the Administrator fails to provide such documentation within such period, for purposes of the auction, Table A in section 504 (adjusted by the 6 percent amount referred to in section 504) shall be treated as entitling the owners or operators of the units specified in Table A to receive the allowances specified in Table A (as so adjusted) during the First Phase.

(3) Limit on sale of second phase allowances.—No owner or operator of a unit or units for which Second Phase allowances are to be issued may sell at the early auction more than 50 percent of the allowances to be allocated to those units, based on the list of Second Phase allowances to be published by the Administrator by December 31, 1991.

(4) Sealed offer to sell.—Owners or operators of units that elect to participate in the early auction shall specify (by a date set by the Administrator) in a sealed offer to sell: (A) the number of allowances to be offered for sale at the early auction, and (B) the minimum price at which such allowances may be sold at such auction.

(5) Notice.—The Administrator shall publish a notice of the total number of allowances to be offered for sale at the early auction under this section.

(6) Sealed bid schedules.—Any person may submit (by a date set by the Administrator) to the Administrator (on a sealed bid schedule provided by the Administrator) offers to purchase specified numbers of allowances at specified prices.

(7) Sales.—The Administrator shall match the lowest offers to sell under this subsection with the highest bids submitted in the bid schedules. All allowances for which the Administrator has established a match shall be sold at the bid price.

(8) Effect of sale at auction.—Any sale of allowances completed through the auction under this section shall constitute—

(A) an immediate obligation by the buyer to pay to the purchaser an amount equal to the matched bid price multiplied by the total number of allowances; and

(B) an obligation of the seller to provide the allowances subject to such bid to the purchaser.

The failure of any person to comply with such obligations shall be considered a violation punishable by the Administrator as provided in section 113(c).

(9) Funds transferred.—No funds transferred from a purchaser to a seller of allowances under this subsection shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or to the Administrator.

(b) Annual Allowance Auctions.—

(1) 5 percent tap.—The Administrator shall withhold 5 percent of the allocation of allowances for each year which would (but for this subsection) be issued for each affected unit at an affected source. The Administrator shall record such withholding for purposes of transferring the proceeds of the allowance sales under this subsection. Except for the allowances reserved for sale or other distribution under subsection (c) and section 505(g) (relating to States experiencing population growth in excess of 25 percent), all allowances withheld under this paragraph shall be offered for sale by the Administrator at auctions under paragraph (2).

(2) Annual auctions.—Commencing in June of 1993 and in June of each year thereafter, the Administrator shall conduct auctions at which the allowances referred to in paragraph (1) shall be offered for sale in accordance with regulations promulgated by the Administrator, in consultation with the Secretary of the Treasury. One-third of the allowances referred to in paragraph (1) which authorize emissions in calendar year 1996 shall be offered for sale at the auction held under this paragraph in 1993; one-third of such allowances shall be offered for sale at the auction held under this paragraph in 1994; and one-third of such allowances shall be offered for sale at the auction held under this paragraph in 1995. In 1996 and thereafter, all of the allowances referred to in paragraph (1) which authorize emissions in the next calendar year shall be offered for sale. The auction shall be open to any person. A person wishing to bid for such allowances shall submit (by a date set by the Administrator) to the Administrator (on a sealed bid schedule provided by the Administrator) offers to purchase specified numbers of allowances at specified prices. Such regulations shall allocate the auctioned allowances on the basis of bid price, starting with the highest-priced bid and continuing until all allowances for sale at such auction have been allocated. The regulations shall not permit that a minimum price be set for the purchase of withheld allowances. Allowances purchased at the auction may be used for any purpose and at any time after the auction, subject to the provisions of this title.

(3)(A) Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, within 90 days of receipt, the Administrator shall transfer the proceeds from the auction under paragraph (2), on a pro rata basis, to the owners or operators of the affected units at an affected source from whom allowances were withheld. No funds transferred from a purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

(B) At the end of each year, any withheld allowances not sold at the auction shall be returned, without charge, on a pro rata basis to the owners or operators of the affected units from whose allocation the allowances were withheld. For purposes of this paragraph, for any affected unit, the term “pro rata basis” refers to the ratio which the allowances allocated to that unit bears to the allowances allocated to all affected units.

(4) Any person holding allowances not withheld under paragraph (1) which authorize emissions of sulfur dioxide for the same year as the allowances being sold at any auction under this subsection may submit those allowances to the Administrator to be offered for sale at such auction. The proceeds of any such sale shall be transferred by the purchaser to the person submitting such allowances for sale. The holder of allowances offered for sale under this paragraph may specify a minimum sale price. Any person may purchase allowances offered for auction under this paragraph. Such allowances shall be allocated to purchasers on the basis of bid price after the auction under paragraph (2) is complete. No funds transferred from a purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

(5) The Administrator shall record and publicly report the nature, prices and results of each auction under this subsection, including the prices of successful bids, and shall record the transfers of allowances as a result of each auction in accordance

with the requirements of this section. The transfer of allowances at such auction shall be recorded in accordance with the regulations promulgated by the Administrator under this section.

(c) Special Reservations of Allowances Withheld Under Subsection (b).—

(1) Reserves.—Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations establishing the reserves referred to in paragraphs (2), (3), (4) and section 505(g) (relating to States experiencing population growth in excess of 25 percent)A portion of the Second Phase allowances withheld under subsection (b) shall be placed in such reserves, as provided in such provisions.

(2) Reserve for direct sale at \$1,500 per ton.—(A) In accordance with regulations under paragraph (1), the Administrator shall establish a Direct Sale Reserve containing allowances in the amount of 100,000 tons per year to be offered for sale as provided in this paragraph. Allowances in the Direct Sale Reserve shall be offered for sale at a price of \$1,500 per allowance, adjusted by the Consumer Price Index.

(B) Requests to purchase allowances from the Direct Sale Reserve under this paragraph shall be approved in the order of receipt until no allowances remain in such Reserve, except that an opportunity to purchase such allowances shall be provided to the independent power producers referred to in section 503(l) before such allowances are offered to any other person. Each applicant shall be required to pay 50 percent of the total purchase price of the allowances within 6 months after the approval of the request to purchase. The remainder shall be paid on or before the transfer of the allowances.

(C) If the Administrator determines that, during any period of 3 consecutive calendar years after 1997, less than 50 percent of the allowances available in the Direct Sale Reserve established under this paragraph have been purchased under this paragraph, the Administrator shall terminate the reserve and make such allowances available for auction under subsection (b)(2).

(3) Reserve for direct sale to units in states with average emission rates below 0.9 mmbtu.—(A) In accordance with regulations under paragraph (1), the Administrator shall establish a Direct Sale Reserve containing allowances in the amount of 25,000 tons per year during the first 10 years of the Second Phase to be offered for sale as provided in this paragraph. Allowances in the Direct Sale Reserve shall be offered for sale at a price of \$750 per allowance, adjusted by the Consumer Price Index.

(B) Requests to purchase allowances from the Direct Sale Reserve under this paragraph shall be approved in the order of receipt until no allowances remain in such Reserve. Each applicant shall be required to pay 50 percent of the total purchase price of the allowances within 6 months after the approval of the request to purchase. The remainder shall be paid on or before the transfer of the allowances.

(C) Only an owner or operator of a unit located in a State with a Statewide average sulfur dioxide emission for electric utility steam generating units of 0.9 lbs per mmBtu shall be eligible to purchase allowances under this paragraph.

(D) If the Administrator determines that, during any period of 3 consecutive calendar years, less than 50 percent of the allowances available in the Direct Sale Reserve established under this paragraph have been purchased under this paragraph, the Administrator shall terminate the reserve and make such allowances available for auction under subsection (b)(2).

(4) Reserve for distribution to certain units.—The Administrator shall reserve allowances in the amount of 62,000 tons per year from the Second Phase allowances withheld under subsection (b) for distribution under this paragraph. The Administrator shall distribute such reserved allowances to coal fired electric utility steam generating units which have 1985 sulfur dioxide emission rates less than 1.75 lbs/mmBtu and greater than 1.2 lbs/mmBtu and which are part of a utility system with a 1985 system-wide average sulfur dioxide emission rate for coal fired units of 1.5 lbs/mmBtu or less. Each such unit shall receive

such allowances in a tonnage amount equal to 50 percent of the amount computed as follows: multiply 1.2 lbs/mmBtu by the amount by which the unit's fuel consumption at a 60 percent capacity factor exceeds the unit's baseline. The allowances computed under the preceding sentence shall be adjusted to ensure that the total of the allowances distributed under this paragraph is equal to 62,000. The Administrator shall reallocate to each unit any reduction or increase in the allowances to be distributed based on such adjustment on the basis of the ratio which the allowances which would (but for such adjustment) have been distributed to such unit bears to the total allowances which would (but for such adjustment) have been distributed to such units.

(5) Proceeds.—Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, the Administrator shall require that the proceeds of any sale under this subsection be transferred, within 90 days after the sale, without charge, on a pro rata basis to the owners or operators of the affected units from whom the allowances were withheld and that any unsold allowances be returned, without charge, on a pro rata basis, to such owners or operators. No proceeds of any sale under this subsection shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or to the Administrator. For purposes of this paragraph, for any affected unit, the term “pro rata basis” refers to the ratio which the allowances allocated to that unit bears to the allowances allocated to all affected units.

SEC. 520. REGULATORY REFORMS TO REDUCE AIR EMISSIONS.

(a) Prohibition.—No State regulated electric utility shall be eligible for interpollutant trading under section 503(c) unless the State regulatory authority exercising ratemaking authority over such utility has certified by January 1, 1995, to the Administrator that the State regulatory authority and such utility have complied with subsection (b) of this section.

(b) State Regulatory Rulemaking—Not later than January 1, 1995—

(1) each such utility shall undertake and complete a planning process and prepare a plan which evaluates a range of resources, including both new power supplies and energy conservation, in order to meet expected future demand at the lowest system cost and provide to such State regulatory authority such plan;

(2) each such State regulatory authority shall review and consider each plan provided under paragraph (1) and identify and implement appropriate State regulatory mechanisms to ensure that implementation of the plan referred to in paragraph (1) is profitable to the utility; and

(3) each such utility shall implement any plan approved by the State regulatory authority.

The State regulatory authority shall specifically identify under paragraph (2) regulatory mechanisms to ensure that utility investments in energy conservation and load management measures do not restrict or impair a utility's ability to earn its authorized rate of return.

(c) Unregulated Utilities.—All owners or operators of affected units under Phase I whose wholesale rates are not subject to the jurisdiction of the Federal Energy Regulatory Commission or of a State regulatory authority, shall develop and implement, through a public hearing process, a least-cost plan as described in section 520(b)(1) by January 1, 1995. The plan shall be submitted to the Administrator, the Secretary of Energy, and Congress and shall be updated every 2 years.

(d) States Choosing Not To Adopt.—If a State regulatory authority chooses not to implement the regulatory reforms under subsection (b)(2), it shall submit by January 1, 1995, to the Administrator a written statement of its determination not to implement such proposed reforms together with its reasons for not doing so.

(e) Savings Provision.—Nothing in this section precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

(f) Definitions.—As used in this section:

(1) The term “State regulatory authority” means any State agency which has ratemaking authority with respect to the sale of electric energy or energy services by any electric utility (other than such State agency).

(2) The term “State regulated electric utility” means any electric utility with respect to which a State regulatory authority has ratemaking authority.

SEC. 521. EFFECT OF TITLE ON CERTAIN FEDERAL AGENCIES.

Nothing in this title shall be construed to prohibit the Tennessee Valley Authority from receiving, retaining, and using, in accordance with other applicable law, any funds received under this title from the sale of allowances.

ADDITIONAL VIEWS OF CONGRESSWOMAN COLLINS AND CONGRESSMAN BLILEY

We would like to make a few comments on the report language relating to the establishment of Consolidated Metropolitan Statistical Area (CMSA) and Metropolitan Statistical Area (MSA) boundaries within Title I of the bill.

The idea of changing the boundaries to the CMSA or MSA by operation of law is central to the language in the bill on this issue. Yet, the report does serious damage to this principle. Under the report language, the redesignation would occur by operation of law if and only if the governor of the affected state is willing to allow that to happen. Thus, the ball is in the court of the governor to convert the process from a redesignation by operation of law to a fully discretionary procedure. All the governor need do under the report language structure is to object to the redesignation (to CMSA or MSA) by operation of law, and then, the discretionary determination commences.

The report language then suffers from far too great a focus on the discretionary determination. The implication of the report language is that the discretionary weighing of factors is the preferred *modus operandi* for determination of whether a CMSA/MSA redesignation should occur. For the report to blatantly state that the statutory test for redesignation is whether or not the areas in question “significantly” contribute to the air quality problem is a direct contravention of the language of the bill. When one considers that the bill language on this subject resulted from a clearly understood agreement, it is especially inappropriate to do such damage to the spirit of the negotiated language. Furthermore, it does not make sense to suggest that the test is whether the areas in question contribute “significantly” while discounting the relevance of the enumerated factors which are earlier mentioned as the determinants of a significant contribution.

Finally, the agreement of March 26, 1990 pertaining to the CMSA/MSA issue specified that the report language may refer to the northern portion of a particular district as a good example of an area which might be appropriate to exclude from a CMSA. However, the report language refers instead to rural and suburban areas in general, throughout the country!! This protracted reference is far beyond the scope of the agreement and should be reduced to a recitation of the suburban and rural portions of the originally specified district.

Cardiss Collins.

Tom Bliley.

ADDITIONAL VIEWS OF REPRESENTATIVE EDWARD MADIGAN

I strongly disagree with the action of the Committee in requiring that an area currently meeting the national air quality standards for ozone be automatically included within an ozone nonattainment area simply because it lies within the same Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA) as the nonattainment area. The result of this change, buried in a 150 page substitute offered to Title I of the bill, will be to sweep dozens of suburban and rural counties surrounding 27 U.S. cities including Chicago, Atlanta, Sacramento, and Philadelphia into nonattainment areas.

In the Chicago area, 25 percent of the population of Illinois, currently living in air quality attainment areas will be subjected, by arbitrary legal decree, to controls and sanctions previously imposed only on areas actually in violation of national air quality standards. Those areas would be subject to enhanced vehicle inspection and maintenance programs, transportation controls, and emission offset requirements for any new sources of air pollution such as new factories and businesses. The impact on economic growth could be staggering.

I understand the need and desire to identify and control significant sources of pollution that while located outside a nonattainment area contribute to the problem within the nonattainment area. Controls and sanctions however, should be based on ambient air quality data and a finding by the State or Administrator of the EPA that such sources contribute significantly to a violation of the national air quality standards in the nonattainment area. To simply decree that areas now in attainment shall be considered to be in nonattainment and therefore subject to controls and sanctions is irresponsible legislating and bad public policy.

Ed Madigan.

ADDITIONAL VIEWS OF MR. MARKEY AND MR. MOORHEAD

As proposed by the President and introduced as H.R. 3030, the Clean Air Act Amendments will help encourage electric utility companies to pursue cost-effective energy conservation and renewable energy measures by instituting a cap on sulfur dioxide emissions. But the cap will not take effect before the year 1996 or 2001. We believe that more can and must be done in the next decade to encourage the aggressive pursuit of conservation and renewables.

Conservation and renewables not only significantly curtail sulfur dioxide emissions, but they emit little or no nitrogen oxides and carbon dioxide, and decrease the environmental degradation of land and water associated with oil imports and energy production. These important environmental attributes should make conservation and renewables a central part of the nation's clean air policies immediately.

During consideration of H.R. 3030, the Committee accepted an amendment we offered, which was incorporated as Section 503(j). This provision would permit utilities to earn additional SO₂ ALLOWANCES BY AVOIDING EMISSIONS THROUGH COST-EFFECTIVE INVESTMENTS IN IMPROVED ENERGY EFFICIENCY AND THE USE OF RENEWABLE ENERGY SOURCES—THESE ALLOWANCES MAY THEN BE USED BY THE UTILITY THAT EARNES THEM OR THEY MAY BE SOLD OR TRADED TO OTHER UTILITIES—MUCH LIKE ALL OTHER ALLOWANCES ESTABLISHED BY THIS BILL. THIS NEW INCENTIVE WILL ENCOURAGE UTILITIES TO PURSUE CONSERVATION AND RENEWABLES PRIOR TO THE EMISSION CAPS IN THE YEAR 1996 OR 2001.

Furthermore, this provision will help growth states' utilities meet their future needs by establishing a system by which they can immediately earn allowances through conservation, while simultaneously lessening their future growth in demand for electricity.

To ensure that utilities will make the conservation and renewable energy investments that will lead to the greatest reductions in acid rain-forming emissions and promote the environmental goals of the bill, several regulatory and administrative safeguards have been included in this provision. These include:

1. The total number of these allowances is capped at 400,000 over the life of this program. Three-quarters of these allowances are allocated from within the overall Phase 2 cap of 8.9 million allowances. The reductions in SO₂ EMISSIONS FROM THE

CONSERVATION AND RENEWABLE ENERGY INVESTMENTS WILL ENSURE THAT THE INTEGRITY OF THE CAP IS NOT COMPROMISED BY THE REMAINING ONE-QUARTER OF THE ALLOWANCES NOT EXPLICITLY ALLOCATED FROM THE 8.9 MILLION.

2. Before a utility company is eligible to earn these new allowances, several conditions must first be met. One, the utility must adopt a least cost electric power plan, which must be approved by their State public utility commission (PUC). Two, the utility's PUC must implement "regulatory reform"; reform which will entail the PUC amending its rate-setting process so that utilities' profits will not suffer a financial penalty from the successful implementation of conservation measures. We believe that utilities must be allowed to profit from conservation so that they will aggressively pursue all cost-effective means of improving their customers' energy efficiency.

Three, the utility must pay for the conservation or renewable energy, either directly or through purchase from a third-party provider. Four, the utility must quantify its estimates of avoided emissions according to regulations promulgated by EPA. Five, a utility, or its parent holding company, must own an affected unit. (It should be noted that in many cases it is a utility holding company's retail subsidiary that makes conservation investments even though the retail subsidiary is not the owner or operator of an affected unit, as defined in H.R. 3030.)

It is important to note that nothing in this provision requires a utility to adopt a least cost plan, or requires a State to adopt regulatory reform. Rather, H.R. 3030 establishes voluntary least cost planning and regulatory reforms as pre-conditions of receiving this new, federally provided benefit of additional allowances.

3. By its very nature this provision helps to accelerate utilities' control of SO₂ EMISSIONS. BY ESTABLISHING A SYSTEM OF EARLY ALLOWANCES, UTILITIES WILL BE ENCOURAGED TO HASTEN THEIR SO₂ REDUCTIONS. FURTHERMORE, THIS PROVISION REQUIRES THAT HALF OF THE ALLOWANCES EARNED UNDER THIS PROVISION CAN ONLY BE USED FOR SO₂ EMISSIONS AFTER THE YEAR 2000, WHILE THE REMAINING HALF CAN ONLY BE USED AFTER THE YEAR 2006.

Since the purpose of this provision is to provide incentives for early reductions in SO₂ EMISSIONS—BEFORE THE ALLOWANCE CAPS ARE IN PLACE—UTILITIES MAY EARN ALLOWANCES UNDER THIS PROVISION ONLY UNTIL THEY HAVE A UNIT THAT IS AFFECTED BY THE BILL. IN OTHER WORDS, UTILITIES WITH PHASE 1 UNITS MAY ONLY EARN ALLOWANCES UNTIL 1996; OTHER UTILITIES MAY EARN ALLOWANCES UNTIL 2001.

4. The provision builds in central roles for the State PUCs and the U.S. Environmental Protection Agency, both of whom must oversee and approve applications for these allowances. State PUCs are closest to utility companies and are in the best position to evaluate carefully utility investments, as well as utility claims of energy savings. The EPA's overall responsibilities to administer the allowance trading system are maintained in this provision, along with requirements to consult with the Department of Energy. (Publicly owned utilities that are not subject to the regulation of State PUCs must receive EPA approval of their applications, but not PUC approval.)

It is imperative that EPA promulgate rules pursuant to this provision as soon as possible, and in no case later than 18 months after enactment, in order to maintain the Committee's intention to provide an early and certain incentive to invest in conservation and renewables. We have chosen not to delineate which energy conservation technologies shall be considered eligible to earn allowances under this provision. However, it is our expectation that EPA and the States will take a thorough and comprehensive view of all potentially appropriate technologies, and will encourage all technologies and investment opportunities by utilities which will lead to cost-effective reductions in SO₂ EMISSIONS AND OVERALL SYSTEM ENERGY USE.

5. Since it cannot be known with certainty the exact level of SO₂ EMISSIONS THAT ARE AVOIDED BY THE ACCELERATED USE OF CONSERVATION AND RENEWABLES PURSUANT TO THIS PROVISION, THE METHODOLOGY EMBODIED HEREIN USES THE CONSERVATIVE ASSUMPTION THAT THE ELECTRICITY

THAT IS BEING AVOIDED WOULD HAVE BEEN GENERATED WITH EMISSIONS AT A RATE OF ONLY 0.4 POUNDS OF SO₂ PER MILLION BTU (LBS/MMBTU) OF FUEL INPUT. BECAUSE MOST POWER PLANTS EMIT AT A RATE GREATER THAN 0.4 LBS/MMBTU, IT IS LIKELY THAT CONSIDERABLE REDUCTIONS IN SO₂ EMISSIONS WILL OCCUR AS A RESULT OF THIS PROVISION.

We believe that H.R. 3030, as amended, will create a strong and effective incentive for utilities to immediately pursue energy conservation and renewable energy sources as key components of their acid rain control strategies. We believe that this provision of the bill will establish a balanced and workable approach that will provide certainty for utility companies that are considering conservation and renewables, while at the same time strengthening the environmental goals of this legislation.

SUPPLEMENTAL VIEWS OF CONGRESSMAN GERRY SIKORSKI

Since arriving in Congress seven and one-half years ago, I have worked to draft legislation to protect the environment and human health from acid rain while protecting jobs from dislocation and ratepayers from excessive electricity rate increases. In four successive Congresses I introduced acid rain control legislation that drew widespread, bipartisan, national support because it successfully did just that. I am delighted that this committee, by a 42-1 vote, has approved clean air legislation containing an acid rain control title that will begin doing what should have been done over a decade ago.

The acid deposition (acid rain) title of this legislation (Title V) includes a number of important findings that recognize what those of us who believe that acid rain must be controlled have long argued:

That acid rain resulting from emissions of sulfur and nitrogen oxides "represents a threat to natural resources, ecosystems, materials, visibility, and public health;"

That "the problem of acid deposition is of national and international significance and cannot be addressed adequately without effective State-Federal cooperation;"

That strategies and technologies to control acid deposition exist now and are economically feasible; and

That "current and future generations of Americans will be adversely affected by delaying measures to remedy the problem."

These findings are not new and not surprising. They represent the collective wisdom of years of research, over 6000 studies on acid deposition, and literally hundreds and hundreds of hours of public testimony by expert witnesses before subcommittees of the Energy and Commerce Committee. Nearly a decade ago, the National Academy of Sciences (NAS), this country's most prestigious national scientific body, called for a 50% reduction in sulfur dioxide emissions to control acid rain. This legislation will almost do that—nearly two decades, by the time controls are required, after the NAS's call.

These findings also recognize the tremendous costs of acid rain:

The EPA has found that ozone levels in many parts of the country, in part the result of nitrogen oxides, reduce crop yields up to 33%. The damage: \$2 to \$3 billion per year.

The Interior Department has estimated acid rain damage to materials, buildings and historical monuments at up to \$60 billion per year.

The Congressional Research Service reports annual forest damage from acid deposition in the Eastern United States alone at \$1.75 billion.

Seventy-six million Americans pay with their lungs and bodies the direct health costs of exposure to excessive ozone. Sulfur dioxide, nitrogen oxide and ozone injure pregnant women and threaten people with heart disease, asthma, bronchitis or emphysema.

The American Lung Association 5 years ago reported that the human health care alone from air pollution run as high as \$40 billion annually. This year they issued an update: the human toll from air pollution now stands at \$100 billion per year.

The Congressional Office of Technology Assessment estimates that 50,000 Americans die prematurely each year due to the chemical precursors to acid rain. Researchers at the John F. Kennedy School at Harvard University put this figure closer to 100,000 premature deaths each year.

The list of costs goes on and on—visibility, forestry, fishing, monuments human life—but the bottom line is clear. Air pollution exacts a price in money, lives and irreplaceable economic and natural resources.

The ability of this committee to arrive at an acid rain title that addresses the concerns of Members representing all regions of this country illustrates the veracity of the premise underlying legislation I have introduced in each of the last four Congresses: effective control of acid rain can be achieved without unduly burdening any constituency or region of the country.

The acid deposition title reported by this committee shares the approach which has highlighted acid rain legislation I have introduced in every Congress since the 98th: The combination of strong controls to protect the environment and human health with balancing features to ensure that jobs and electricity rates in no region of the country will be unduly harmed.

In the 98th Congress I joined Health and Environment Subcommittee Chairman Henry Waxman in authoring H.R. 3400, the National Acid Deposition Control Act. This legislation garnered strong bipartisan support in the House of Representatives, with over 135 cosponsors from every region of the country. This strong and nationwide support stemmed from the dual core elements of the legislation: A strong, 14 million ton reduction in the precursors of acid rain, combined with protection against loss of jobs or utility rate increases. This protection, funded through a one mill, nationwide electrical generation fee, would have provided billions of dollars in assistance to regions particularly affected by acid rain reductions. Despite this protection, in the face of intense opposition from the very industries and groups it was designed to protect, the legislation failed in subcommittee by a single vote.

In the 99th Congress I introduced H.R. 4567, the Acid Deposition Control Act of 1986, the most strongly supported acid rain control bill in the history of Congress. Over 180 House members gave this bill a bipartisan, geographically broad base of support. This legislation called for a similar 14 million ton reduction in sulfur and nitrogen oxides, and provided protections for jobs and against increase in electricity rates of more than 10 percent in any single rate.

The Health and Environment Subcommittee passed H.R. 4567 by a vote of 16–9, but a series of procedures and delays prevented full consideration of the legislation by the full committee. In the second session of the 99th Congress, industry opponents spent more in opposition to this legislation than on any other issue before Congress.

In the 100th and 101st Congresses, I introduced similar legislation (H.R. 2666 and H.R. 1470, respectively), which again attracted the most cosponsors and the most bipartisan, nationwide cosponsorship of any acid rain control legislation in those Congresses. Again the legislation contained safeguards to protect industries, regions and individuals against economic hardships. Again those whom the bill would have protected opposed it. In the 100th Congress, the Health and Environment Subcommittee held hearings and reached tentative agreement on H.R. 2666 before Clean Air Act legislation stalled over other issues.

In the 101st Congress, the Clean Air Act Amendments proposed by the Bush Administration contained the first-ever Administration-backed acid rain proposal. It called for acid rain reduction goals identical to the reduction achieved in my

legislation and included a feature for which I had fought—a cap on emissions to prevent deterioration of acid rain reductions in later years. The feature it didn't contain was protections for constituencies adversely affected by acid rain control.

The Bush Administration's 180 degree reversal from the past eight years of Administration policy is testimony to the desire of the American people to stop acid rain once and for all.

Nevertheless, H.R. 3030 as introduced by the Administration contained features directly contrary to the goal of acid rain control. We succeeded in removing the most egregious features of the Administration proposal, including: a repeal of existing legal protections against tall smoke stacks which cause acid rain, and loopholes which would have allowed clean coal technology to waive acid rain control requirements.

The acid rain control legislation passed by the Energy and Commerce Committee improves significantly on the Administration acid rain title: by making the emissions cap and allowance trading system more workable; by allowing “growth” and “clean” states adequate credits to meet future electricity needs; by increasing the liquidity of the allowance market; by providing additional allowances to ensure that Midwestern ratepayers won't be subject to “rate-shock;” and by encouraging technology that will lessen the employment impacts of H.R. 3030.

The legislation reported by this committee is environmentally superior to that submitted by the Administration:

It requires a real 10 million ton reduction, rather than projecting it, by imposing an absolute cap on utility emissions;

It provides incentives for earlier SO₂ REDUCTIONS;

It provides incentives for using conservation and renewable energy for acid rain compliance;

It increases NO_x REDUCTIONS FROM THE 2 MILLION TONS CALLED FOR IN THE ADMINISTRATION BILL TO 2.5 MILLION TONS (AND UP TO 4 MILLION TONS IF THE EPA FINDS IT COST-EFFECTIVE). WHEN COMBINED WITH THE ADDITIONAL NO_x REDUCTIONS ACHIEVED IN THE COMMITTEE'S MOBILE SOURCE PROVISIONS THIS SHOULD PRODUCE REAL REDUCTIONS IN NO_x EMISSIONS.

It restores citizens' rights to ensure enforcement of the law.

National acid deposition control legislation is long overdue. I have been working toward it since my days in the Minnesota State Senate. In 1978 I co-authored a resolution calling for adequate safeguards at the Atikokan Power Plant in Canada, near the Minnesota border, which threatened the wilderness land of the Boundary Waters Canoe Area in Northern Minnesota. In 1980, the Minnesota State Legislature passed the first legislation in the history of the North American acid rain debate, and two years later, the first acid rain deposition control law in North America.

The acid rain title reported by the Energy and Commerce Committee is the product of much hard work and sincere efforts by members of the committee. Credit must be given, however, to those Members of the House who have worked over the years to focus attention and to draft a balanced, national approach to this national problem: most prominently, Silvio Conte, Sherry Boehlert and Mo Udall. The greatest credit for passage of national acid rain control legislation, however, belongs to the leadership, guidance and vision of Henry Waxman.

H.R. 3030 as reported by the Energy and Commerce Committee takes good, solid first steps toward addressing the problem of acid rain fairly, firmly and adequately. Such an approach is long overdue.

Gerry Sikorski.

DISSENTING VIEWS OF THE HONORABLE WILLIAM E. DANNEMEYER

INTRODUCTION

Ever since Congress passed the first Clean Air Act almost twenty years ago, the government has reduced air pollution principally by imposing restraints on large entities—oil companies, the major auto manufacturers, and the chemical industry—which were politically acceptable targets of the government's anti-pollution efforts. So long as the burden has remained on these corporate polluters, the environmental movement has prospered and grown.

Indeed, this strategy has significantly reduced total emissions of the major pollutants. According to the Environmental Protection Agency, since 1978 emissions of ambient airborne lead have declined by 88percent, sulphur dioxide emissions have dropped by 35percent, carbon dioxide by 32percent, particulate matter by 21percent, ozone by 16percent, and nitrogen oxide by 12percent. But some argue that these reductions have not sufficiently protected the health of many Americans. For that reason, we have embarked upon the second phase of the fight for clean air.

This second phase will require that the Congress to consider pollution control strategies that will inconvenience the average citizen. Finding acceptable ways to change the daily behavior of millions of Americans will become an essential component of any viable pollution control strategy. It remains to be seen, for example, whether the average citizen will voluntarily restrict his use of the family car. Residents in major metropolitan areas such as Los Angeles, New York, Houston, and Chicago may find environmental policemen in their backyards, telling them to douse their barbeques or mothball their gas-powered lawnmowers. They may have trouble finding a dry cleaner or bakery, and the local hardware store will almost certainly not carry their favorite brand of paint.

Somebody we may encounter a backlash from citizens who resent these sort of intrusions into their everyday lives. Low income citizens, especially, will suffer from restrictions that place a cap on economic growth in their neighborhoods and which may threaten or eliminate their jobs. Will compliance with pollution control strategies break down according to the economic class of the citizen being asked to make these sacrifices? I hope not.

To avoid this sort of resistance, we must be sure that the measures we adopt actually deliver the promised improvement in overall air quality. Nothing would be worse than do embark on an expensive and controversial air pollution control odyssey that promises much, but fails to win the support of the American public.

Because the Committee essentially rewrote H.R. 3030, there have been no credible estimates of the overall environmental or economic impact of the changes adopted these past few weeks. We all know, however, that several of the titles, such as the acid rain, air toxics, and nonattainment titles, will cost tens of billions of dollars annually and threaten hundreds of thousands of existing jobs. We also know that both the cost and the environmental benefit derived from removing that last ton of sulphur dioxide or hydrocarbons is enormous, relative to the cost of removing the first ton. The question we must address is whether the costs associated with removing that last ton justify the accompanying loss of jobs and competitiveness.

Acid rain

What prompted the week-long spectacle of intense negotiations between the so-called “clean” and “dirty” states on Title V? Why did so many representatives of the utility industry choose to camp outside the Energy and Commerce hearing room for days at a time as these deliberations proceeded?

Simply put, we were attempting to allocate the future economic growth among the various regions of this nation, as measured by our use of utility-generated electricity. The growth regions harbor very serious and, I believe, legitimate doubts over Title V's effect on their future ability to grow and to meet the needs of their constituents. But, as important as this struggle is to the

future of these regions, including my own, did we ever question the necessity for a 10 million ton reduction? No. For political reason, that discussion was off the table.

The best data available on the acid rain problem comes from the preliminary report of the National Acid Precipitation Assessment Program (the NAPAP study), yet one hears no mention of these initial findings. In fact, after spending so much of the taxpayer's money, the Congress should at least have waited for this data before plunging ahead on this issue. Would the same silence prevail if the findings had been different?

This study cost the federal taxpayers \$600 million, yet it has been completely ignored. The preliminary report concludes that only 2 percent of our lakes are acidic and that most of the acidic lakes in the Northeast have been that way since pre-industrial times. NAPAP concluded that even if we do nothing, the number of acidic lakes in the Northeast will decline over the next 20 years and increase only marginally over the next fifty years. Similarly, the NAPAP scientists found no evidence of widespread forest decline in North America related to acidic deposition. In fact, they believe that doubling the current level of sulphur dioxide emissions would have little effect over the next century.

One would think that these preliminary findings from a \$600 million government-funded study would have whetted the Committee's appetite for the final report due later this year. An exhaustive study such as this should, at the very best, influence the final work product of this committee. But, instead, the Committee accepted the premise that the reduction in sulphur dioxide should equal 10 million tons, not a ton more or less. Of course, 10 million tons is a political figure, chosen for political reasons, and seems to have attained the status of holy writ in the course of our deliberations.

In future years, when utilities encounter difficulty obtaining growth allowances under this Act, or when our consumers' electric bills rise incessantly, we may wonder why the Committee acted before the final release of such an ambitious study. Scholars and other observers of this process will ponder why the NAPAP data was left to collect dust while we spilled blood over the allocation of the allowance pie. We may wonder why we never considered options that would have achieved 80 or 90 percent of the emission reduction contained in this bill while avoiding unnecessary job losses and other economic costs.

The nuclear option

Another issue which the Committee ignored is the role that nuclear energy plays in cleaning our air. In attempting to lower emissions of sulphur dioxide and nitrogen oxide from our utility plants, the single most cost efficient and pollution-free alternative is nuclear power.

According to the Republican leader of the Committee, Rep. Norman Lent of New York, three coal or oil fired plants are required to replace the energy capacity of the Shoreham plant on Long Island, which has been delayed for more than a decade by environmental obstructionists. We must understand that every time we delay or postpone the operation of a new nuclear power plant, we implicitly choose to burn more fossil fuels. How many of the oil or gas fired plants currently in operation or under construction would even be needed if we were to exercise our nuclear option?

Jobs

I note with interest that one of my colleagues, Mrs. Collins, offered an amendment to provide relief to low-income persons who face significant increases in their utility bills as a consequence of the provisions in Title V. Mrs. Collins should be applauded for her concern on this issue. But a \$10 or \$20 per month utility bill increase is the best of the problems facing America's low income families as a result of this legislation. In fact, hundreds of thousands of low income persons will suffer, directly and indirectly, from the provisions in this bill. Like the NAPAP findings, the effects of H.R. 3030 on America's underclass population have been ignored.

A study by Robert W. Hahn and Wilbur A. Steger concluded that workers living in areas defined by the Department of Commerce as “underclass” areas (areas with high levels of chronic unemployment, low per capita income, high numbers of high school dropouts, etc.) “would be most affected by any increases in unemployment or underemployment caused by [the] Clean Air Act.” The Clean Air Act amendments, they say, “may well spell economic disaster for thousands upon thousands of already extremely troubled and hard-pressed Americans.”

They estimate the Clean Air Act will place up to 2 million American jobs at risk. The air toxics title alone would jeopardize between 600,000 and 1 million jobs. As we all know, these jobs are largely at the lower end of the economic spectrum. Doesn't this require that we engage in more of what my colleague from Pennsylvania, Mr. Ritter, calls “accountability”? Before we happily vote for a measure that will devastate many regions and industries in this country, shouldn't we be sure that these ambitious regulatory schemes will yield some real health and environmental benefits? And, when the livelihoods of so many are at stake, isn't this burden of proof a very high one? Would a bill that achieves 90 percent of the environmental gains in the bill before us now, but which saves many of the jobs that will be destroyed, be a better bargain in the long run?

Given the enormous scope and expense of the air toxics title, just what do we know about the relationship between air toxics and human cancer? In 1981, two renowned epidemiologists from Oxford, Sir Richard Doll and Richard Petro, were commissioned by the Office of Technology Assessment to assess this relationship. At that time, alarmists were generating headlines with claims that between 70 and 90 percent of all human cancer was pollution related. They concluded that pollution accounted for only 2 percent of cancers. Their findings are summarized below:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The EPA has accepted these estimates. As syndicated economics columnist Warren Brookes points out, a 1989 EPA risk assessment study titled “Unfinished Business” estimated that no more than 1.2 to 2.5 percent of all human cancers are caused by pollution. EPA regulatory efforts, moreover, would prevent only a fraction of these cancers—or between 0.25 and 1.3 percent of all cancers. Knowing this, who wants to be the one to deliver the news that a factory is closing due to a hypothetical cancer risk that is not as significant as smoking, diet, and other behaviorally induced factors?

At the micro levels, the transaction costs associated with this legislation are enormous. To an entrepreneur, time is money. The costs of complying with the paperwork required under this Act, especially the permitting requirements in Title IV, will undoubtedly deter many individuals from starting their own businesses. The penalties section moreover, may deter small businessmen from competing in industries that must comply with these provisions. Businessmen will think twice before expanding an existing business, out of fear that such an expansion would trigger one of the thresholds in the air toxics or nonattainment titles. Who suffers the most from these decisions? Low wage workers, of course.

American businesses hoping to compete in international markets will soon find that the cost of complying with environmental regulations is prohibitive. We already spend twice as much on pollution control—\$85 billion per year—than does the entire European Community—which spends only \$42 billion per year.

Ozone nonattainment

No one is more aware of the problems caused by urban smog than I, having lived in the Southern California region all my life. But, again, issues which should have occupied much of this Committee's time were largely ignored for political reasons. Two examples are the EPA standard for ozone nonattainment and various incentives to hasten the turnover of the current auto fleet.

An area is considered to be “nonattainment” for ozone if the fourth highest daily monitor reading taken during the most recent three-year period registers an ozone concentration above 0.12 parts per million for more than one hour. It is important that the standard ultimately adopted be a reasonable one because the consequences that follow designation as an ozone nonattainment area are quite expensive. Is nonattainment status warranted for areas with marginal nonattainment problems? While no one

doubts the necessity of implementing strict pollution control measure in areas such as Los Angeles, the applicability of Title I to areas with minor smog problems should have prompted more debate and attention than it did.

That this standard deserves stricter scrutiny is evident from the data collected by the American Petroleum Institute, which found that every nonattainment area in America, with the exception of Los Angeles, was in compliance with the ozone standard at least 99.5 percent of the time between 1981 and 1985. Some of these areas, which must now adopt expensive control measures, were in compliance 99.98 percent of the time. Put another way, some areas are in complete compliance with the EPA standard 4,999 out of every 5,000 hours, yet are designated as nonattainment areas. What health threat justifies nonattainment status for areas such as these?

Second, with the exception of an amendment offered by Mr. Barton there was no discussion of the emission reductions that can be achieved from either tuning up old cars in need of maintenance or encouraging consumers to take them off the road entirely. Pre-1983 model year cars account for 43 percent of the vehicle miles traveled, yet contribute 84 percent of the carbon monoxide and hydrocarbons and 72 percent of the nitrogen oxide.

Syndicated environmental columnist Alston Chase believes the Congress should look for ways to expedite the turnover of our auto fleet in order to remove these old, dirty cars from our roads. He writes:

Like its predecessor, the present bill does little to stop the biggest polluters—old cars. Instead, owners of new cars must foot the bill. Emissions requirements, according to the Commerce Department, added around \$1,800 to the cost of a new car in 1987. So people buying autos in Maine or Montana will be paying to eradicate smog in Los Angeles.

Unfortunately, the Committee never addressed an ozone attainment strategy which would allow a stationary source, such as a dry cleaner or small factory, to obtain emission offsets from mobile sources (i.e., cars). Such an approach would do more to clean up the Southern California skies than anything else in the Committee's product.

H.R. 3030 requires auto manufacturers to install cannisters and other emission control devices to reduce emissions from the evaporation of fuels, hydrocarbon emissions by 40 percent, and nitrogen oxide emissions by 60 percent. It is important to recall, however, that auto emissions have been reduced by 90 percent since 1970, and 96 percent since 1966, so these additional reductions represent an overall decrease of only two to three percent of the 1970 level.

I have enclosed three charts which show how much we have already reduced emissions from auto tailpipes. It is important to place these expensive new regulations in some perspective.

These requirements will add between \$600 and \$1,000 to the price of a new car, a price that every consumer will pay, regardless of whether they live in an attainment or nonattainment area. While it is important to squeeze every bit of cleanliness out of future cars, we should ask ourselves whether smog-ridden areas such as Los Angeles would be better served by offering the owners of pre-1983 model year cars tax incentives to replace their old, dirty cars with newer, cleaner ones. Rather than requiring consumers in pristine areas of the country to pay \$600 more for a car that is only marginally cleaner than the cars being manufactured today, we could achieve the consent emissions reductions through incentive-based policies that make it financially attractive for consumers in our dirtiest cities to purchase clean vehicles.

CONCLUSION

For all the above reasons, I believe that H.R. 3030 will destroy hundreds of thousands of American jobs, many of them held by low wage workers, for health and environmental benefits that are speculative at best. Stricter environmental regulation and the paperwork it entails will make American products less competitive in international markets, where our industries must compete with companies that do not face the sort of regulations imposed here in America. As a result, our trade deficit will grow and the American underclass will find it more difficult to get out of the poverty trap.

At some point in the near future, I predict that Americans will rebel at some of the measures contained in this legislation, and they will force all of us to reexamine these assumptions. This backlash need not be antienvironmental, it need only be rational.

This is not to argue against any Clean Air Act, just to point out the flaws I see in the bill approved by the Energy and Commerce Committee.

Bill Dannemeyer.

1 Assessments of costs and of job impacts of the Senate bill that were prepared for the Business Roundtable were not used in this discussion. Limitations on these analyses are discussed in enclosed memoranda (John Blodgett, et al., "Clean Air Act Amendments: Comments on Cost Estimates in a Business Roundtable Report," January 29, 1990; and John Moore, "Clean Air Act Amendments: Update of Comments on Jobs Impacts in a Clean Air Working Group Report," March 22, 1990).

2 Prepared by Mira Courpas, Analyst in Environmental Policy, and John Blodgett, Specialist in Environmental Policy.

3 OTA, *Catching Our Breath: Next Steps for Reducing Urban Ozone* Washington, D.C.: OTA-O-412, July 1989).

4 David E. Gushee and Mira Courpas, "Clean Air Act Amendments: Comments on Cost Estimates for Ozone Nonattainment Prepared by E.H. Pechan & Associates for EPA, January 1990."

5 E.H. Pechan and Associates, *Ozone Nonattainment Analysis: A Comparison of Bills*, January 1990. The report analyzes the House Subcommittee version of H.R. 3030 and the amended Senate Subcommittee version of S. 1630.

6 OTA, p. 141.

7 Prepared by David E. Gushee, Senior Specialist in Environmental Policy.

8 Prepared by James McCarthy, Specialist in Environmental Policy.

9 New sources would be regulated three years before existing sources, and there are provisions for early, voluntary compliance by existing sources, but there is no way to estimate those costs separately.

10 Costs for the years 1995 and 2003 were developed by EPA. In addition, EPA identified separately the cost of controlling the last 50 percent of the source categories. CRS developed estimates for the categories to be regulated in 1997 and 2000 by extrapolation.

11 Prepared by Claudia Copeland, Specialist in Environmental Policy.

12 This assumes that either EPA or a State's regulations require that permit fees accompany permit applications, a point that is not addressed in H.R. 3030. It is possible to argue that sources should not pay the required fee until the permit is actually issued since, if the permit were to be disapproved for some reason, the source would have paid a fee for something that it did not receive. Thus, if EPA or a State's regulations do not require a source to pay a permit fee until the permit is issued, States would not begin to receive permit fee revenues until some later time.

13 Prepared by Larry Parker, Specialist in Energy Policy.

14 Studies reviewed for this analysis: E.H. Pechan & Associates, Inc., *Comparison of Acid Rain Control Bills* (Prepared for EPA and OTA, November 1, 1989). ICF Resources Incorporated, *Economic Analysis of Title V (Acid Rain Provisions) of the Administration's Proposed Clean Air Act Amendments (H.R. 3030/S. 1490)* (Prepared for EPA, September 1989); *Economic Analysis of Title IV (Acid Rain Provisions) of the Senate Bill (S. 1630)* (Prepared for EPA, January 1990); *Analysis of Acid Rain Options* (Memorandum to EPA, November 30, 1989); *Preliminary Comparison of Emission Reduction Cost and Coal Market Impacts Under Alternative Proposals* (Prepared for EPA, March 6, 1990); and *Preliminary Comparison of Ten Options*

for Achieving Phase I Emission Reductions, in terms of Annual Costs, Electricity Rates, and Coal Market Impacts, in Seven Key Midwestern States (Prepared for EPA, November 6, 1989). Larry Parker and John Blodgett, Clean Air Act Amendments: Preliminary Cost Estimates for Title IV, Acid Deposition Control, of S. 1630 (CRS Memorandum, January 31, 1990) [enclosed]. Larry Parker, Acid Rain Control: Analysis of Title IV of S. 1630. (CRS Report 90-63 ENR, January 31, 1990). Doug Carter, U.S. DOE, Office of Fossil Energy. Acid Rain Control Costs: A DOE Screening Model (Presentation at conference: Solving the Acid Rain Problem: Options and Implications, September 14, 1989). Temple, Barker & Sloane, Inc. Economic Evaluation of H.R. 3030/S. 1490 "Clean Air Act Amendments of 1989" (Prepared for the Edison Electric Institute, August 30, 1989). Michael T. Woo, The President's Acid Rain Plan May Not Work As Intended: Problems, Results, and Solution (A Preliminary Analysis) (Memorandum to Chairman John D. Dingell, November 15 1989).

15 Parker, Larry B. Acid Rain Control: An Analysis of Title IV of S. 1630. CRS Report for Congress 90-63, January 31, 1990. p. 16.

1 Testimony of Dr. Philip A. Bromberg, Director, Center for Environmental Medicine, University of North Carolina at Chapel Hill, before the Subcommittee on Health and the Environment, Committee on Energy and Commerce, U.S. House of Representatives [hereinafter Committee], February 28, 1989 (Washington, D.C.).

2 Testimony of Dr. Philip J. Landrigan, Mount Sinai School of Medicine, New York City, on behalf of the American Academy of Pediatrics and the American Public Health Association, before the Committee, February 28, 1989 (Washington, D.C.).

3 Dr. Morton Lippman, New York University Medical Center, "Health Benefits from Controlling Exposure to Criteria Air Pollutants," Health Benefits of Air Pollution Control: A Discussion (Washington, D.C.: Congressional Research Service, U.S. Library of Congress [hereinafter CRS], February 1989), p. 94. Testimony of Dr. Philip A. Bromberg *supra*, note 1.

4 Testimony of Dr. Homer A. Boushey, Professor of Medicine at University of California at San Francisco, before the Committee, February 28, 1989 (Washington, D.C.).

5 Testimony of Dr. Philip J. Landrigan, on behalf of American Academy of Pediatrics and American Public Health Association, before the Committee, February 28, 1989 (Washington, D.C.).

6 Testimony of Dr. Boushey *supra*, note 3; Dr. Landrigan *supra*, note 4.

7 *Id.*

8 Testimony of Thomas Godar, President, American Lung Association, before the Committee, February 28, 1989 (Washington, D.C.).

9 U.S. Environmental Protection Agency [hereinafter EPA], Air Quality Criteria for Ozone and Other Photochemical Oxidants, (Research Triangle Park, North Carolina: August 1986).

10 *Id.*

11 U.S. Congress, Office of Technology Assessment [hereinafter OTA], *Catching Our Breath: Next Steps for Reducing Urban Ozone* (Washington, D.C.: 1989).

12 *Id.*

13 *Id.*

14 *Id.* See also, National Acid Precipitation Assessment Program [hereinafter NAPAP], *Interim Assessment: The Causes and Effects of Acidic Deposition*, Vols. III and IV (Washington, D.C.: 1987).

15 EPA, Office of Public Affairs "Environmental News: EPA Lists Places Failing to Meet Ozone or Carbon Monoxide Standards," press release (Washington, D.C.: July 27, 1989).

16 U.S. National Park Service, Highlights and Updates: Air Quality in the National Parks (May 1989).

17 OTA *supra*, note 10.

18 See, e.g., South Coast Air Quality Management District, Air Quality Management Plan: South Coast Air Basin (El Monte, California: 1989), pp. 3–10.

19 OTA *supra*, note 10.

20 OTA, Acid Rain and Transported Air Pollutants: Implications for Public Policy (Washington, D.C.: June 1984), pp. 149–153.

21 OTA, Urban Ozone, Testimony of James M. Lents, South Coast Air Quality Management District, before the Committee (Los Angeles, California: 1987), note 19, pp. 59–67.

22 EPA, “Analysis of Clean Air Act Strategies on Northeast Ozone” (November 1989).

23 EPA, Background Information, “EPA Researchers Confirm That Natural Emissions of VOC May Play a Significant Role in the Formation of Ozone in some Areas of the Country” (May 1989); W.L. Chameides, R.W. Lindsay, J. Richardson, C.S. Kiang, “The Role of Biogenic Hydrocarbons in Urban Photochemical Smog: Atlanta as a Case Study” *Science* (September 16, 1988).

American Lung Association, Health Effects of Ambient Air Pollution (New York, New York, 1989), pp. 65–67.

24 Testimony of Don Theiler, on behalf of the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials, before the Committee (Washington, D.C.: February 28, 1989).

25 *Id.*

26 EPA, Report on Clean Air Act Amendments (January 20, 1990).

27 *Id.* See also Morris Ward, “Evaluating Health Benefits in Clean Air Act Regulatory Impact Analyses,” Health Benefits of Air Pollution Control: A Discussion (Washington, D.C.: CRS, February 1989).

28 *Id.*

29 *Id.*

30 EPA, “National Air Quality and Emissions Trends Report,” 1988, (March, 1990), Fig. 4–3, p. 88.

31 EPA, Promulgation Notice, National Ambient Air Quality Standards for PM–10 Particulate Matter, 52 Federal Register 24641 (July 1, 1987). See also, EPA, Office of Air Quality Planning and Standards, Strategies and Air Standards Divisions, “Review of the National Ambient Air Quality Standards for Particulate Matter: Assessment of Scientific and Technical Information” (January 1892), pp. 40–48.

32 C. Pape, “Respiratory Disease Associated with Community Air Pollution,” 79 American Journal of Public Health (May 1989), p. 623.

33 B. Carey, “Air Toxics Emissions from Motor Vehicles,” EPA, Emission Control Technology Division, Technical Report EPA-AA-TSS-PA-86-5 (September 1987), Table 2–12, p. 29.

34 EPA, “Review of the National Ambient Air Quality Standards for Particulate Matter: Assessment of Scientific and Technical Information,” *op. cit.*, p. 116. See also, EPA, Environmental Sciences Research Laboratory, “Visibility in the

Northeast: Long-Term Visibility Trends and Visibility/Pollutant Relationships,” (August 1978); EPA, Air Quality Criteria for Particulate Matter and Sulfur Oxides (December 1982).

35 U.S. National Park Service, “Air Quality in the National Parks,” Natural Resources Report 88-1 (July, 1988), p. 2-1.

36 EPA, “Air Quality Criteria for Particulate Matter and Sulfur Oxides.”

37 See EPA, “Proposed Fugitive Dust Policy Statement,” 52 Federal Register 24716 (July 1, 1987). See also, U.S. National Commission on Air Quality, “To Breathe Clean Air” (March, 1981), p. 114.

38 EPA, Air Quality Criteria for Particulate Matter (December 1982).

39 EPA, Natural Air Quality and Emissions Trends Report (1987).

1 “Lifetime individual risk” is a measure of the probability that an individual will develop cancer as a result of exposure to an air pollutant over a lifetime (i.e., a 70-year period.)

2 See Report to Congress on Indoor Air Quality (EPA-400/1-89-001, August 1989) for current estimates of cancer public health risks from exposure to indoor air toxics. EPA also is evaluating the noncancer public health risks resulting from short-term and long-term outdoor exposures to toxic air pollutants.

3 Gottlieb, Shear and Seale, “Lung Cancer Mortality and Residential Proximity to Industry,” 45 Environmental Health Perspectives (1982), p. 154.

4 Id.

5 U.S. EPA, Office of Air Radiation, “Updated Source-Specific Cancer Risk Information” Air Toxics Exposure and Risk Information System (ATERIS), provided to Rep. Henry A. Waxman, January 10, 1990. This is an update from an earlier 1989 ATERIS report.

In a February 6, 1990 letter to the Committee about these reports, EPA said: “As you know, EPA did not publicize the ATERIS data. These data are from working files intended for use by professional staff, and are available to members of your Committee. When EPA responded to Congressman Waxman’s request for the data, we expressly addressed the data weaknesses and cautioned against misinterpretation. As you know, we recently updated the data and the same cautions apply.”

6 U.S. EPA, “Coke Oven Maximum Individual Risk Estimates”, provided to Rep. Henry A. Waxman, March 1989.

7 Wisconsin Department of Natural Resources, Division of Health, Health advisory for people who eat sport fish from Wisconsin water (PUBL-IE-019: April 1990); Memorandum To: Mr. Jim Grant (Fish and Wildlife Contaminant Advisory Committee), From: Mr. John Hesse (Interagency Center on Health and Environmental Quality), State of Michigan, Department of Public Health (February 1, 1990); National Wildlife Federation, Lake Michigan Sport Fish: Should You Eat Your Catch? Lake Michigan Sport Fish consumption Advisory Project, Technical Support Document, Vols. I and II (August 1989).

8 Great Lakes Water Quality Board, 1987 Report on Great Lakes Water Quality, Report to the International Joint Commission (including Appendices A & B) (November, 1987), p. 236; Great Lakes Science Advisory Board, 1989 Report to the International Joint Commission, Hamilton, Ontario (October, 1989), p. 116; M. Gilbertson, ed., Council of Great Lakes Research Managers, Proceedings of the Workshop on Cause-Effect Linkages (Chicago, Illinois: March 28-30), pp. 45.

9 Testimony of Jane Elder, on behalf of the Sierra Club, before the Subcommittee on Health and the Environment (Washington, D.C.: June 22, 1989).

10 J.A. Foran, M. Cox, and D. Croxton, Sport fish consumption advisories and projected cancer risks in the Great Lakes Basin, American Journal of Public Health, Vol. 79 (1989), pp.322-325.

1 OTA, Acid Rain and Transported Air Pollutants (1984), fig. 2, p. 6; National Research Council of the National Academy of Sciences [hereinafter NAS], Acid Deposition—Long Term Trends (1987), p. 158.

In general, acidity is caused by the presence of hydrogen ions. Acidity is measured on the pH scale, which is an index of hydrogen ion concentrations. Pure water is defined as “neutral”—it has a pH of 7. Pure acid has a pH of 0; pure alkaline or base has a pH of 14. (Battery acid has a pH of 1; lemon juice has a pH of 2; coffee has a pH of 5; milk of magnesia has a pH of 10.5.) (See Chart below.) The pH scale is a “logarithmic” scale. That means that a pH of 4 is ten times more acidic than a pH of 5; and 100 times more acidic than a pH of 6. Thus seemingly small numeric differences in pH translate into large differences in acidity.

2 OTA supra, note 1, fig. 2; NAS supra, note 1, p. 140.

3 OTA, supra, note 1, p. 265.

4 ICF, Inc., Study for EPA, Economic Analysis of Title V (Acid Rain Provisions) of the Administration's Proposed Clean Air Act Amendments (September 1989), table A-2.

5 OTA supra note 1, p. 265.

6 NAPAP supra, note 4, Table 1-15., p. 1-49.

7 OTA, Catching Our Breath (July 1989).

8 National Research Council of the NAS, Atmosphere-Biosphere Interactions: Toward a Better Understanding of the Ecological Consequences of Fossil Fuel Combustion (1981), p. 3.

9 OTA supra, note 1, p. 80-81.

10 Testimony of Thomas Godar, M.D., on behalf of the American Lung Association, before the Committee, May 23, 1989 (Washington, D.C.) Part 1, pp. 436, 439-440.

11 H. Ozkaynak, et al., “Analysis of Health Effects Resulting From Population Exposures to Acid Precipation Precursors,” Environmental Health Perspectives. 63:45-55 (1985).

12 NAPAP, “Annual Report, 1987” (April 1988).

13 EPA, Ohio/Kentucky/TVA Coal-fired Utility SO₂, AND NO_{5x} CONTROL RETROFIT STUDY, TABLE 1-6, PP. 1-17.

14 NAPAP supra, note 4, pp. 2-24.

Note.—For all listings above which contain the word “compounds” and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

1 X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂

2 includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCC)_n-OR' where n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCCH)_n-OH Polymers are excluded from the glycol category.

3 includes glass microfibers, glass wool fibers, rock wool fibers, and slag wool fibers, each characterized as “respirable” (fiber diameter less than 3.5 micrometers) and possessing an aspect ratio (fiber length divided by fiber diameter) greater than 3.

4 includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100C

5 a type of atom which spontaneously undergoes radioactive decay.

H.R. REP. 101-490(I), H.R. REP. 101-490, H.R. Rep. No. 490(I), 101ST Cong., 2ND Sess. 1990, 1990 WL 258792 (Leg.Hist.)

End of Document

©2014 Thomson Reuters. No claim to original U.S. Government Works.